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MEDICAL AND PHARMACEUTICAL NETWORK NEWSLETTER

February 2004

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Dear Colleagues,

Welcome to the March 2004 edition of the ITI Medical and Pharmaceutical Network Newsletter. We are starting something new with this issue, in that the Newsletter editorial will be written by a different Committee member for each edition. We are also reinstating the 'Member Profile' feature and would like to thank Dr. Brian Carter for his highly interesting contribution in this issue. If you would like to nominate someone, or if you would like to volunteer to contribute the next 'Member Profile', please contact the Newsletter Editor, Pippa Sandford (ps@pippasandford.com). We would also like to thank Bob Hinchliffe for his extremely informative and useful article on 'Efficient Computing', which provides practical tips and very handy suggestions on making our lives easier in this regard. A large part of this Newsletter is devoted to the HIV/AIDS Workshop held last October. Our thanks go out to David Weeks, for his comprehensive and excellent report on both lectures as well as the compilation of interesting terminological points. We are also grateful to Erline Lequeux for producing the glossary for the French group, and Karin Band for producing the encyclopaedic glossary from the German group. Karin has also provided reviews of *Dorland's Medical Dictionary* and the delightful *Eats Shoots and Leaves*, as well as a round up of the persistently confusing issues regarding epithelial tissues and a list of clarifications on terminology from the Maxillofacial Surgery Workshop of last spring.

As you know, the next workshop will be held on 14 May in Copenhagen, on the subject of diabetes. We would appreciate hearing now from anyone attending who would like to write about the lectures and experience of our first workshop abroad in Scandinavia. And speaking of contributing to the Newsletter - please do!! We welcome your contributions of anything you think might be of interest. There are so many opportunities: web sites you have found that are especially useful, articles or programs you have come across in the media, your own experiences in medical translation. Please do remember, however, that we have to obtain permission to use anything that might have copyright, even articles published on the Internet, so please check if this is required before contributing something. Pippa has a standard letter/email that can be adapted for each case, so if you need a copy, please email her at the address above.

As ever, we are very grateful for Pippa's help as Newsletter Editor in compiling a Newsletter that is informative, entertaining and extremely useful.

We hope you enjoy this latest edition of our Newsletter and look forward to hearing from you in future issues!

Best wishes,

Shelley Nix
Coordinator

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Any opinions expressed in this newsletter are those of the individual and not of the Medical and Pharmaceutical Network as an organisation.

My two careers

I have been fortunate in having two consecutive fulfilling and interesting careers, firstly as a family doctor and then as a medical translator. After some thirty years in practice, I found that the mounting pressure of trying to do more and more within an already long working day was taking away too much vocational satisfaction. The NHS would allow me to take early retirement and so the question arose – what to do with my time?

I trained at The London Hospital in Whitechapel where the training was very practical and involved much contact with the lively, multi-ethnic East Enders. The book and film then current, ‘Doctor in the House’, gave a good, if exaggerated, impression of life as a medical student at that time. My first performance in front of the god-like consultant on a ward round already involved the importance of words. I had to take a clinical history from a patient lying there before the white-coated throng and I fell straight into a well-known trap. The sharp young East Ender answered my first, hesitant question literally: ‘What brought you here?’ with ‘An ambulance, doc!’ Other memories include trailing the district midwives on rattling bicycles along the Mile End Road to home deliveries.

My first house jobs were at Salford Royal Hospital, near my hometown. The novelty of being a qualified doctor, and therefore God’s gift to suffering mankind, soon evaporated on being flung in at the deep end in a busy Casualty department. The nurses realised that I had knowledge but little idea of how to apply it, and some were sympathetic and helpful. Two student nurses were sisters from Germany and one of them was very good at reviving me with snacks on night duty when I had had no time for supper. An invitation to the hospital Christmas dance led to the traditional Mills and Boon happy ending and Ann and I have been together now for 44 years. She had come over to learn English and train as a nurse, as recommended by Lufthansa because she was too young to start training as a stewardess. She was anxious to travel, saddened and appalled by experiences at the end of the war and in post-war Germany. The family were refugees from the Russians, from their home near Rostock.

Soon afterwards, I was called up into the army for my two years National Service and after basic training, including such essentials as how to march, drill, and dig latrines, I was posted to Oldenburg in Germany. Then I had to introduce myself to Ann’s family in Wolfenbüttel, near Hanover, as the future son-in-law. The whole situation was not easy, not very long after the war, but fortunately Ann’s father was a GP and we got on very well together. Two brothers were medical students and two other sisters were nurses, hence we had much in common in spite of huge differences due to language and nationality. After Ann had qualified, we were married in Wolfenbüttel: I was posted to the obstetric and gynaecology department of the British Military Hospital at Hanover, where our first son was born. I extended my stay in the army and spent nearly 4 years in Germany.

I had long intended to be a GP and we decided to return to England after my military service. My first practice was in Manchester, with a very miserly GP who spent nothing on improving his practice. One of my jobs as his assistant was to extract those long strands of cotton wool that were used to pack the sample bottles of tablets from drug company representatives: the cotton-wool had to be torn up into swabs for use with injections!

I had long intended to be a GP and we decided to return to England after my military service and eventually came to live in Dunstable. The newly founded practice grew until I had six partners. I trained as a GP trainer and had 13 trainees, now called registrars, each for one year’s supervised vocational training in the practice. This was great for keeping me up to date because whilst they were sitting in with me they could question me about my diagnoses and treatment: ‘Do you really think injections of the newest expensive drug ‘X’ is a good treatment for dandruff?’ We designed our own purpose-built practice premises in 1982 and life was great for a while. Based on my obstetric operative experience, I also had a regular sessional post in the

Labour Ward and obstetric theatre in our district hospital for many years, very different from pedalling down the Commercial Road many years before.

It was rewarding to observe one of the babies I delivered at home myself later becoming a medical student and then qualifying. However, an example of the factors that made me decide to retire was the occasion when his mother came to see me about herself: after she had gone, I realised that, such was the ever-present hurry, I had not even asked her how her son was getting on in his house job. That was a measure of how remote my ideal of the caring doctor who knew all the family had become in the reality of everyday NHS pressure.

Ann and I visited Germany regularly but my command of the language remained only moderate. I had been a member of the Anglo-German Medical Society for some years: a friendly organisation that meets annually in the UK and Germany in alternate years (please note, a 'commercial', medical translators are welcome). I had chatted with another member who was a translator, Dr David Winstanley, and I was attracted to the idea of translation. I became a part-time partner, enrolled at Luton University for the IOL ELIC and passed AIL. The university started an MA course in applied translation, an ideal opportunity for me, so I retired from the practice and enrolled for this: I obtained the MA the following year.

One of the course modules was a period of supervised work in a translation agency and as Peter Barber had given a lecture during the course, I wrote and enquired if his agency would take me on. I think I still have the formal reply from Gillian Hargreaves informing me what would be expected of me (correct attitude and conduct, wearing a suit, and certainly not smoking). For this module, I had to submit a detailed assessment of what I had learned and Gillian provided the university with a detailed evaluation of my efforts and application. I did wear a suit and I was allowed to do some real translation (as well as being the tea-boy sometimes) and I gained much that has proved invaluable since, such as organising a proper system for tracking work. I acquired many useful ideas and translation techniques.

Eyvor Fogarty talked to the course about the ITI and its sadly defunct mentor scheme: I was impressed and attended the AGM at Harrogate, gaining an enormous amount by networking. Shelley Nix gave a most interesting presentation for new entrants to the profession. For my thesis, I had to translate and write a lengthy dissertation on an 8,000 word medical text: Karin Band kindly sent me copies of 'Der Internist' as examples and steered me towards the most suitable library facilities in London.

Such help from these and many other ITI members was followed by the relatively rapid build up of offers of work, often passed on by translators too busy to accept the job themselves. I wanted to work part-time only but I was totally mistaken in thinking that I might be viewed as a threat, or competition, to established freelance translators. When I started, 7 years ago, there was no way I could have foreseen the rapid changes that email and the egroup would bring about nor, fortunately, the almost unique despair and frustration that PCs can cause. I consider that my attainments in using my medical knowledge and training in the German language pale against the amazing achievements and accomplishments of linguists who acquire so much knowledge about disease, anatomy, and drugs, in two or more languages, without attending medical school.

Another reason that attracted me to translation was that my wife and I enjoy working together: I read aloud the German text whilst Ann listens and checks and revises my draft translation. She passed the AIL and has an OU degree in politics and economics as well as her nursing experience, whilst her English language is excellent. She not infrequently corrects my English style or register, and picks up omissions or mistakes: she often suggests the meaning of an obscure word or phrase and I am lucky to have her help. Ann has not edited this article.

When not working, my free time is devoted to our growing family: the three children and six grandchildren bring much joy. We hear about the 'empty nest syndrome' but we wonder what that is. My daughter is the only medical offspring, a GP; she used her German by spending three months on a student elective in Bavaria (she phoned home to ask what language the patients were speaking).

I am a keen member of a Rotary club; we enjoy meeting and working together. This organisation is unusual in that every club attempts to have one member from each of a variety of occupations: we try to put something back into the community, locally and internationally. Rotary has funded almost the entire cost of the vaccine for the current global campaign aimed at eradicating polio. My club holds annual collections of old or disused tools outside two local supermarkets; we gathered nearly 2,000 tools last year. They filled my garage before being sent to be refurbished at a local workshop for people with learning difficulties and then shipped to African villages, to be put to good use again.

I have visited more than 19 Rotary clubs in Germany as well as others in other countries and it is fascinating to see how different clubs try to respond to the needs of their own and overseas communities. Some German clubs are still very formal, the members addressing each other as 'Herr So-und-so' and using the impersonal 'Sie' form of address, even though they meet each other over a meal every week. As is the custom, I usually present a small banner from our club and receive one of theirs in return, to present with their greetings to my club. In one Braunschweig club I was surprised by the reaction when I stood up and thanked them in German for the fine meal, intending to say, 'and now I would like to give you a banner'. I managed to make the verb 'to hand over' - 'übergeben' - reflective and actually said, 'Jetzt möchte ich mich übergeben' ('I would now like to vomit').

I appreciate my good fortune in my careers and I welcome this opportunity to thank you all for encouraging me in my second profession. I try to reciprocate by helping on the ITIMedNet egroup whenever I actually think I know the answer, albeit usually from my medical, rather than my linguistic, experience.

Thanks to Maggie Hook for drawing our attention to this:

The names of some medicinal substances will be changing from Dec. 2003. The MHRA and other agencies have decided that the UK must at last fall into line with the rest of Europe and use rINNs instead of BANs. The BP changed to rINNs in July 2003 and holders of marketing authorisations will have until December 2004 to apply for a name change. A list of rINNs with their corresponding BANs can be found at www.mhra.gov.uk/banslist.pdf

There will be 2 exceptions - adrenaline and noradrenaline will continue with the same name.

In some cases, the change in spelling (from BAN to rINN) is minor, e.g. amoxycillin to amoxicillin, cholestyramine to colestyramine but in others e.g. benzhexol to trihexyphenidyl, pramoxine to pramocaine, the change is substantial.

A list of the BAN/rINN changes is also on page "x" of the latest BNF (46), under "Name changes".

Maxillofacial Surgery MTW – French terminology

(F Cheynet et al. La voie d'abord rétro-mandibulaire dans les fractures du condyle mandibulaire. *Rev Stomatol Chir Maxillofac* 1997;98:288-94)

Corrigenda and addenda

Corrigenda	
miniplaques	miniplates
<p>branche montante</p> <p><u>Note:</u> There are two facial bones which, in the old nomenclature, have a 'branche montante': (1) the maxilla, whose 'branche montante', 'apophyse montante', 'apophyse frontale' = 'processus frontal du maxillaire' in the new nomenclature ('frontal process of the maxilla'; 'processus frontalis maxillae' [both terms are TA]); and (2) the mandible, whose 'branche montante (du maxillaire inférieur)' is now the 'branche de la mandibule' ('ramus of mandible' [TA]; 'mandibular ramus'; 'ramus mandibulae' [TA]). This text is about surgery of the mandible; the frontal process would be in the wrong jaw (the maxilla), and on the wrong side (towards the midline). Interestingly, the term used in the rest of the paper is 'le ramus'.</p>	<p>mandibular ramus; ramus of mandible [TA]; ramus mandibulae [TA]</p>
ostéotomie verticale sous-condyloïdienne	<p>vertical subcondylar osteotomy [Ref 14]</p> <p><u>Note:</u> Not all subcondylar osteotomies are vertical.</p>
[réduction et] contention	<p>[reduction and] fixation</p> <p><u>Note:</u> This is the typical collocation, in this context. 'Contention' could be rendered also as 'osteosynthesis' (a term still fairly widely used in maxillofacial surgery, as opposed to orthopaedic surgery, where 'fixation' – whether internal or external – is preferred), or 'immobilization'.</p>
sous sontrôle de la vue	<p>with direct fracture site visibility; under direct vision</p> <p><u>Note:</u> 'Under direct vision' is a standard phrase in surgical texts.</p>
décubitus dorsal (en)	<p>[with the patient] positioned supine; [with the patient] in dorsal decubitus</p> <p><u>Note:</u> 'Supine, dorsal decubitus' suggests that both adjectives are required to qualify 'decubitus'. It should also be noted that 'dorsal [or, for that matter, ventral or lateral] decubitus' is a phrase beloved of (American) radiologists and surgeons. Although it uses 'decubitus' in the correct Latin sense of 'lying down', such expressions as 'supine' or 'lying on his or her back' (and 'prone' or 'lying on his or her side'/'side-lying') are preferable.</p> <p>(The En use of 'decubitus', with a plural 'decubiti' (!) [= pressure sore(s)] is a grammatical horror, and should be proscribed.)</p>
blocage mandibulo-maxillaire	<p>intermaxillary fixation IMF; maxillomandibular fixation MMF</p> <p><u>Note:</u> These are standard terms in maxillofacial surgery</p>
dessinée (incision)	<p>drawn; marked; traced</p> <p><u>Note:</u> If the incision is outlined on a piece of paper or on a preop. photo of the patient, it may be said to be 'sketched'; if the pattern is outlined on the skin, it is said to be 'drawn', 'marked' or 'traced'.</p>

sangle ptérygo-massétérière	pterygomasseteric sling <u>Note:</u> This term occurs in [Ref 14] (“the pterygomasseteric sling is sharply incised”) and elsewhere in the journal and textbook literature. What is meant is the muscle sling produced by the medial pterygoid muscle, which attaches to the inside of the mandible, at the mandibular angle; and the masseter, which attaches to the outside of the mandible, at the same site.
lame malléable	malleable (ribbon) retractor <u>Note:</u> A ‘lame’ can be a scalpel blade (although it is difficult to see how a flexible scalpel blade would work); in the context of wound drainage, it is a ‘corrugated rubber drain’; if qualified by ‘malléable’, it stands for a “bendy” strip of metal (often copper) – a malleable retractor – which holds the tissues away more gently than does a rigid retractor.
translation [des tissus mous vers l’avant et le haut]	[here:] anterior and superior retraction of the soft tissues
surjet intradermique	intra-dermal running suture <u>Note:</u> A ‘surjet’ implies a continuous series of stitches – a continuous ([o:] running) suture. ‘A stitch’ would suggest a single interrupted suture, which would obviously be inadequate in this context. Also, the ‘intradermique’ bit is essential: a ‘surjet’/‘running suture’ could also be placed in such a way as to have the stitches entering and exiting the skin, which would, obviously, produce a poorer cosmetic result.

Addenda		
LL 40-1	ostéosynthèse par fil d’acier	(transosseous) wiring; wire osteosynthesis
L 54	mémoire	project
	service	department
LL 71-3	occlusion dentaire antérieure au traumatisme	pre-fracture occlusion; pre-fracture occlusal relationship
L 75	4 ou 3/10	0.4 or 0.3
L 76	élastiques	interarch elastics
	“fils d’aciers perlés”	[rough rendering:] direct wiring <u>Note:</u> A detailed explanation would have to point out that this is a system developed by a French surgeon: a fishing lead or a bead is attached to one end of the wire, to act as a stop on the lingual side; the wires are passed through between adjacent teeth in the upper and in the lower jaw; the maxillary and the mandibular wires are twisted together on the vestibular side. Main advantage: saves insertion time.
L 91	respectées et réclinées	spared and retracted; spared and held out of the way <u>Note:</u> ‘récliner’ is also used in the sense of ‘to reflect’ – however, that term would be used with larger, floppier structures, not with nerves.
L 98	bord basilaire	lower border
L 99	on décolle en sous-périosté	subperiosteal dissection of ... is performed; ... are dissected subperiosteally
L 106	non découvert	not exposed
L 121	plaque 4 trous avec pont	straight four-hole plate
L 124	emplacements des vis	screw sites
L 131	hémostases	haemostasis <u>Note:</u> No plural in En.

LL 131-2	en 3 plans	in three layers
L 132	déc	metric [indication of suture size] metric 2 = USP 3-0; metric 1.5 = USP 4-0
Fig. f	fracture réduite et ostéosynthésée	following reduction and fixation with a plate and screws; fracture reduced and (rigidly) fixed with plate and screws; fracture reduced and plated <u>Note:</u> some authors use ‘fixated’ instead of ‘fixed’.
LL 171-2	fractures du massif facial	facial fractures
L 174	patient édenté inappareillable	edentulous patients in whom intraoral appliances ([o:] dentures and splints) cannot be used
L 181	ostéosynthèse par plaque vissée	plate-and-screw fixation; plating
L 190	échancrure sigmoïde	sigmoid notch; mandibular notch
LL 206-7	voie de rhytidectomie	facelift approach; rhytidectomy approach
L 208	offre un jour limité	affords poor fracture site visibility; affords limited exposure
L 213	appareil discal	articular disc
L 216	contention par fil d’acier	wiring
LL 219-20	embrochage en va-et-vient	antegrade-retrograde K-wire fixation <u>Note:</u> This technique involves the antegrade [= proximal-to-distal] insertion of a K-wire into the distal fragment, followed by reduction and the retrograde [= distal-to-proximal] insertion of the same K-wire into the proximal fragment.
L 224	abord sous-angulo-mandibulaire	submandibular approach
L 243	voie d’abord orale	transoral approach
L 247	utiliser le matériel transjugal	to insert the hardware through the cheek; to place the screws transbuccally (through a trocar)
L 263	montage	construct
L 272	vissage	screw fixation
L 276	fractures plurifocales	multiple fractures
LL 282-3	ablation du matériel d’ostéosynthèse	removal of (fixation) hardware

**HIV and AIDS Workshop
St George's Medical School
3rd October 2003**

Report by David Weeks

St George's Hospital Medical School always strikes me as an ideal setting for a Medical and Pharmaceutical Network workshop. The presence of some of the country's leading medical specialists and the immediate proximity of so many patients seems to bring a sense of reality to the somewhat theoretical world in which we are immersed most of the time. I was therefore not altogether surprised as I moved to my seat in the lecture theatre to see a pair of legs sticking out behind the back row of seats. However, having two teenage children, I am quite used to being treated as though I am completely mentally debilitated, so when I casually mentioned to my neighbour that there was a spare pair of legs behind us the response was not unexpected. Having eventually decided that perhaps something ought to be done about these disembodied legs, I plucked up courage and investigated further. It then transpired that they belonged not to some errant patient, nor even to an escapee from the mortuary, but a fellow workshop attendee prostrate on the floor as a result of a back problem brought on by travelling to the meeting by Underground. It was at that point that I decided I was watching too much Casualty and so crept back to my seat to concentrate on the talks to follow.

The morning talk was in fact given by Dr Mark Wansborough Jones, an expert in AIDS whose experience with the disease dates back to the very early days. His paper, entitled "AIDS and HIV Management," gave us a potted guide to the history and epidemiology of HIV and AIDS, starting with the point at which rumour became published fact in the New England Journal of Medicine of December 1981 with articles on a "New Acquired Cellular Immunodeficiency". According to Dr Wansborough Jones, these articles coincided with an increased observation of a new entity - "a concatenation of signs and symptoms adding up to syndrome" -, although one that was not yet recognised as a disease.

What is in fact remarkable in the story of AIDS is not just the frighteningly short timescale of its development, but actually the speed of the medical response to it, with the rapid definition of the infection - seen initially as affecting young, previously healthy gay men -, the identification of the virus and subsequently the recognition of its presence not only in the United States and Europe, but also across Africa. Indeed, it was with this recognition of a heterosexual AIDS epidemic in Africa that the whole perception of the disease started to change and it came to be viewed as "acceptable." The first HIV antibody test for the presence of virus in the blood was discovered in 1984/1985. This was followed in 1986 by the launch of a special programme by the WHO to collect data on AIDS and preliminary therapy was developed in 1987, following the rediscovery of azidothymidine, or AZT. Admittedly AZT was not the golden bullet, but at least it meant that the medical profession could offer a form of treatment. In 1991 came the recognition that women could pass on the infection to their children, leading to the development of treatment regimens to prevent mother-child transmission. Highly Active Antiretrovirus Therapy (HAART) was proposed for the first time in 1995, while in 1996 Brazil became the first developing country to provide antiretroviral therapy via its public health system.

Following this whistlestop tour through the history of AIDS, we were then reminded of the scale of the disease around the world. While exact figures are obviously difficult to come by, Dr Wansborough Jones presented us with estimated numbers (from 1998) showing there to be 22.5 million HIV-infected people alive in sub-Saharan Africa, 6.7 million (and increasing) in South-East Asia, 890,000 in North America and 500,000 in Western Europe. These bald figures, however, conceal a multifaceted picture. In Europe, for example, the composition of infected cases has changed with the arrival of populations from North Africa. Furthermore, the exposure categories vary from country to country: in Spain, for instance, the worst problem is injecting drug use, whereas in the UK the problem is greatest among homosexuals. In contrast to this, in Africa, India and Thailand, transmission is predominantly heterosexual, with a particular problem in Africa being mother-to-baby transmission. Paradoxically, this last form has a positive side in that it is much easier to intervene in such cases.

We were then shown a graph of the likelihood of developing AIDS within 3 years of the identification of HIV infection on the basis of the measurement of the number of lymphocytes (CD4 cells) in blood. The normal count is 750 per mm³ of blood, whereas less than 200, in Dr Wansborough Jones' words, means trouble. At the same time, if the number of viral copies per millilitre is greater than 100,000 then there is a high viral infection, while less than 3000/ml is indicative of a low load. It is now accepted that an undetectable virus load is less than 50 copies/ml, meaning that the disease is well controlled. Thus, the likelihood of developing AIDS becomes greater as the viral load increases and the CD4 count decreases.

AIDS is described as the development of opportunistic infections or tumours. Originally it was defined as a "reliably diagnosed disease that is at least moderately indicative of underlying cellular immune deficiency in a person with no known cause of cellular immunodeficiency nor any other cause of reduced resistance reported to be associated with the disease." Subsequently this definition was extended to include the concept of an individual being HIV antibody positive. The opportunistic infections associated with AIDS include pneumocystis carinii pneumonia (PCP); CMV retinitis; cerebral toxoplasmosis; cryptococcal meningitis; cryptosporidium and microsporidium associated with diarrhoea and, of particular interest in view of the afternoon's talk, tuberculosis. Dr Wansborough Jones pointed out that TB is not a disease that is simply associated with AIDS, but one that is in fact reactivated in AIDS. Among Africans, one of the first signal events of AIDS is the reactivation of tuberculosis, a fact which has led to a change of the definition of AIDS to include TB; in other words anyone with HIV who develops TB has AIDS.

Turning to the management of HIV, Dr Wansborough Jones explained that HIV cannot be eliminated from cells, but that it is possible to interact with the virus at various stages in its replication. Thus, HIV1 comes to the surface of CD4 cells, enters the cell, inserts RNA into the cell, reproduces in the cell and causes the cell to die more rapidly. Reverse transcriptase acts on RNA to produce cDNA outside the cell nucleus and then enters the cell nucleus and inserts itself into the cell's DNA. Proteases then chop up the DNA to form new viruses. Highly Active Antiretrovirus Therapy – or HAART – involves the use of inhibitors that act on the different stages in this process - reverse transcriptase inhibitors and protease inhibitors. It was also mentioned in passing that integrase acts at the stage at which cDNA attempts to enter the nucleus, although integrase inhibitors are not yet readily available.

While the common perception of AIDS therapy involves the prescription of numerous different drugs taken at regular intervals over the course the day, recent trends have been to simplify treatment regimens, firstly so that the patient does not have to take an endless series of tablets and secondly to reduce side-effects to a minimum. This has led to the concept of triple therapy with 2 nucleoside analogues (reverse transcriptase inhibitors) plus a protease inhibitor/NNRTI (non-nucleoside reverse transcriptase inhibitor) or 3 nucleoside analogues. The intention here is to prevent the development of viral resistance. Thus, HAART has decreased mortality, reduced the incidence of AIDS and brought down the number of bed days. The bad news is that the virus cannot be cured – it can live on in memory cells in the lymph nodes and then re-emerge. The good news however is that treatment has had an enormous effect on the number of people presenting with AIDS. Combination therapy has allowed HIV sufferers back into the community, while the pill burden has also been reduced; for example, didanosine can now be taken as 1 tablet once a day.

There are of course side-effects of HAART: lipodystrophy in the case of protease inhibitors, lactic acidosis in that of nucleoside analogues, as well as mitochondrial toxicity, all of which can constitute treatment-limiting factors or necessitate the addition of other forms of treatment. Virological failure can emerge as a result of viral resistance, poor adherence, intercurrent illness or pharmacokinetic problems relating to absorption or intracellular metabolism. In the case of viral resistance, there may be rapid replication, a high mutation rate, swarms of quasi species which cannot be detected by the normal tests and also latency in long-lived memory cells. It is thus possible to have two or more types/species of virus in a cell at the same time, with the new one being drug-resistant. In addition, the old one may be reactivated.

Dr Wansborough Jones ended his talk by stating that the question which now faces physicians is which are the best drugs to progress to when treatment is failing. Current developments involve therapeutic drug level monitoring and resistance assays, adherence clinics and megaHAART. Finally, there are also new drug classes in the pipeline, such as fusion inhibitors and nucleotide analogues, as well as immune manipulation with IL-2.

If the morning talk had provided us with a broad panorama of the problem of AIDS, the afternoon presentation was much more a detailed and in-depth investigation of one particular aspect. Dr Stephen Lawn, who had worked previously in Kumasi, Ghana and the Center for Disease Control in Atlanta and more recently in the Hospital for Tropical Diseases in the UK, fascinated us with "The Impact of HIV on Tuberculosis". The problem of tuberculosis, he declared, was that in the 1970s and 1980s it was viewed as a disease that belonged to the Victorian era for which cure rates were very high. By 1993, however, the WHO had declared a global emergency. Worldwide there were 8 million new cases of tuberculosis and 3 million deaths annually and its re-emergence came to be associated with the advent of HIV, to the extent that they were referred to as the "Deadly Duo". Speaking from his own experience, Dr Lawn said that in 1993 in Ghana 24% of new TB patients were HIV +, as opposed to approximately 5% of non-TB patients. In Southern Africa, up to 80% of TB patients had HIV co-infection. However, while 85% of the world's TB/HIV co-infected people live in sub-Saharan Africa, it still remains a global problem.

Dr Lawn then looked at the natural history of TB and the normal host immune response to *Mycobacterium tuberculosis* (MTB). *Mycobacteria* are slow-growing bacilli but the key to their pathogenesis is that they are persistent. Acquisition is by the pulmonary route in the form of aerosol spread, resulting in smear-positive or 'open' pulmonary tuberculosis. There is then an

innate immune response to this infection, involving phagocytosis by macrophages, lysosomal fusion and intracellular killing so that interestingly only one in four people exposed to the bacterium actually develop TB as a result of the development of acquired immunity.

Crucial to the understanding of tuberculosis and its relationship to HIV, however, is that the mycobacterium can in fact be resistant to killing and persist in the body. Thus, MTB infection persists in 25-50% of exposed individuals and the mycobacteria replicate within the intracellular environment of macrophages. Subsequent antigen presentation to CD4+ lymphocytes leads to the development of cell-mediated immune responses and delayed hypersensitivity. Interleukin (IL)-12 directs the clonal expansion of T-helper type I (Th 1) lymphocytes, resulting in secretion of interferon γ , which is a potent activator of macrophages. Further release of chemokines such as interleukin-8 and pro-inflammatory cytokines, particularly tumour necrosis factor (TNF)- α , facilitates mononuclear cell recruitment and activation

The result is the formation of a ball of cells or a granuloma. This is the chief form of response to tuberculosis and its aim is to restrict mycobacterial replication. What then occurs is a situation of latency - the bacterium is unable to replicate or to escape. Mycobacteria can then be found in the lung, mediastinum or disseminated throughout the body and their presence can be determined by means of the tuberculin skin test. Purified protein derivative (PPD) is injected and a granulomatous response is obtained in the presence of tuberculosis. One third of the world's population has latent TB, while in Africa this is the case in two-thirds of the adult population. Tuberculosis develops when the immune response is outweighed by mycobacterial replication, which occurs when latency is either not established or not maintained. The granuloma fails and uncontrolled mycobacterial replication occurs.

The disease of tuberculosis is in fact an immunopathology, in other words it is immune mediated. The crucial factor is that mycobacteria persist. Tissue destruction occurs as a result of inflammation, with the release of lytic enzymes and activation of fibroblasts. There is both a local and systemic effect with the production of TNF- α (cachexin), which mediates wasting. The symptoms of TB are in fact due to the immune response, when there is a progression from infection to disease. Primary tuberculosis is the failure of the initial containment of the infection, leading to early disease (5% of cases within up to 2 years), usually occurring in children and in the lower lobes of the lung. By contrast, reactivation TB is the late reactivation of latent TB (the lifetime risk of which is 10%).

Having thus set the scene for us, Dr Lawn then turned to the impact of HIV on the epidemiology of TB. HIV-1 is the strongest risk factor for TB and there are a number of reasons for this. In the first place, HIV possibly increases the rate of primary infection as a result of nosocomial and community exposure to MTB. This risk is also increased with lower CD4 counts. Secondly, HIV affects the innate immune response. Thirdly, HIV impairs the ability to form a granuloma. And finally HIV causes granulomas to fail at a later stage. As far as reactivation disease is concerned, the average risk of disease over a lifetime is 10%, but if the subject is PPD+ and has HIV this figure rises to 10%/year.

HIV also has an impact on the clinicopathological features of TB. The clinical features are characterised by extrapulmonary and miliary disease, mycobacteraemia and increased mortality. Chest radiology reveals no immune response and no shadowing on x-ray. On post-mortem examination, there is disseminated multi-organ involvement as well as occult disseminated disease ('slim' disease). Additionally, the immune response is switched off. In terms of histopathology

there is a spectrum of appearances, but the ability to form granulomas is lost in the presence of HIV.

Dr Lawn then turned to the impact of HIV on the host immune response to TB. In the first place macrophage function, involving chemotaxis, phagocytosis, antigen processing, microbicidal activity and cytokine secretion, is impaired. There is then a numeric loss of CD4 + lymphocytes. This is followed by selective clonal depletion of MTB-specific CD4+ lymphocytes and dysregulation of cell-cell interactions. The result is impaired granuloma formation and disruption of established granulomas when cells are able to migrate in and out of the granuloma. HIV-1 co-infection thus causes MTB reactivation.

Furthermore, there is bidirectional synergy or interaction between TB and HIV. Thus, the life cycle of HIV occurs in CD4 cells. The virus binds to cell RNA to form DNA, which integrates with the genes in the nucleus before budding. Those cells in which HIV replicates must be activated (i.e. engaged in the immune response) in order to speed up viral replication. In vitro, MTB plus HIV-infected CD4 cells plus macrophages result in increased HIV replication. In vivo, HIV-infected patients with TB have an increased plasma HIV load. TB is associated with immune activation and therefore an increase in HIV-1 replication. The deleterious impact of HIV in patients with TB is greatest at the tissue site of the TB disease, as for example in pleural tuberculosis. Episodes of TB then accelerate the decline in immune function and the progression to AIDS.

In conclusion, Dr Lawn summarised the process by saying that HIV increases the transmission of TB, the susceptibility of the patient to infection, the progression to primary TB and the reactivation of latent TB as well as altering the clinicopathological features of TB. HIV targets the specific cells required for an effective immune response to TB and markedly impairs the host granulomatous response to *M. tuberculosis*. The interaction between HIV and TB is thus bi-directional, leading to the sobriquet of "the deadly duo".

Points of terminological interest picked up in the lectures at the workshop

Consultant in Infectious Diseases

In Fr, this would be an 'infectiologue'.

Consultant in HIV Medicine

In Fr, the term 'sidénologue' is found in very recent Web material (e.g. the current programme of the Association des Sidénologues Libéraux de Provence)

CDC

This is probably one of the most frequently mis-expanded abbreviations out.

CDC stands for the 'Centers for Disease Control and Prevention' [i.e. not 'Center', 'Centre', or 'Centres'; nor 'of' – all of which may be found, even in the professional literature].

CD

= cluster of differentiation [but, unless an explanation is required, is always used as 'CD', also in other languages].

gay men; homosexuals

Both terms were used in the lecture.

One of the biggest problems in HIV medicine is the question of PC (politically correct language). Usage tends to fluctuate, and when translating/interpreting – especially at the lay level – it would be wise to check which the latest accepted and acceptable version is. (In German, I was told some years ago, ‘schwul’, which used to be totally pejorative, has now become a term used by gay men to describe themselves. The more recent comment, on a German Web site, that this term is now ‘fast wertneutral’ seems to point in the same direction.)

doing funny things

This is another – huge – problem area in HIV and AIDS terminology. Initially, even doctors had little idea of the sexual practices adopted by some of their patients. There is, in fact, a rich vocabulary, which may be required for the translation of certain texts.

When I had to deal with this about 10 years ago, definitions and foreign-language equivalents were extremely difficult to come by. Nowadays, the Internet provides a large number of sites (some with illustrations; many of them porn).

<http://gay.singles.de/info/lexikon/rimming.shtml>

proved very helpful for German definitions; while

<http://www.francegay.biz/gay/index.php?showtopic=28&view=getnewpost>.

is a mine of terminology (and shows that ‘rimming’, for which I could not find any Fr slang terms 10 years ago, has now got at least two equivalents at that level).

needlestick accidents

The term is not confined to injuries caused by needles, but is used in the general sense of injuries caused by sharp objects (“sharps”).

surgeons vs physicians

In BrEn, a physician is a doctor who does not operate on his or her patients. Physicians are traditionally addressed as ‘Dr’.

Surgeons are doctors who operate on their patients (general surgeons, obstetricians/gynaecologists, orthopaedic surgeons, etc.). They are traditionally addressed as ‘Mr’.

In AmEn, the term ‘physician’ is used in the general sense of someone qualified to practise medicine (including surgery).

In general parlance, a ‘physician’ is a doctor: “Physician, heal thyself.”

opportunistic infections

Purists maintain that it should be ‘opportunism’; de facto, ‘opportunistic’ appears to be much more widely used, both as a qualifier of ‘pathogens’ and of ‘infections’.

gas exchange in the lungs

In Fr, there is the term ‘hématoze’ (which, despite its apparent formation, does not mean disease of the blood!)

Kaposi

The pronunciation [-‘pouzi:] is typical of English usage. In Central Europe, the name may still be stressed on the first syllable, and pronounced Hungarian-style, with the -s- pronounced -sh- [as in ‘sugar’]. Moritz Kaposi was, in fact, Hungarian.

CMV

cytomegalovirus.

In G, the -o- is replaced by -ie- (Cytomegalievirus; Zytomegalievirus).

EBV

Epstein-Barr virus

In Fr, the “vernacularized” abbreviation VEB is not uncommon (similar to what has happened to HIV > VIH; HBV > VHB).

thrush

The popular name for *Candida* infection of the mouth; also used for genital candidal infection (‘vaginal thrush’). The same goes for the Fr ‘muguet’ and the G ‘Soor’.

MBT

= *Mycobacterium tuberculosis*

In Fr, still very frequently: 'le BK' (= bacille de Koch).

As a taxonomic name, *Mycobacterium tuberculosis* is italicized; the genus name has a capital initial, the species name has a lower-case initial. At the first mention in a text, the name is written out in full; if the name recurs in the same text, the genus name is shortened to its initial (*M. tuberculosis*).

chest clinic

In Fr: consultation de pneumologie; in G: pulmologische ([o:] pulmonologische; pneumologische) Ambulanz

box and whisker plot

Fr: diagramme en boîte; diagramme en "boîte et moustaches"

G: Kastendiagramm; Box-Plot; Box-Whisker-Plot; Box-Whisker-Diagramm

phlebotomist

'Phlebotomy' is used in a very curious sense in En, since (nowadays) it involves the sticking in of a needle, not the cutting into a vessel.

I have yet to find a straightforward translation of 'phlebotomist' (the person who draws the samples - who needs no qualifications other than a couple of lessons in how to apply a tourniquet, find a vein, stick the needle in, and draw the sample).

The nearest I have found in Fr comes from Rev Prat (Paris) 2003;53:177:

"Le rôle du médecin se borne en général à la prescription et à l'interprétation de l'examen [= prélèvement], le prélèvement étant assuré par un(e) auxiliaire médical(e)."

In Germany, taking venous blood samples is a task for the doctor (or the medical student in the clinical years). The task may be delegated to a nurse:

<http://bmj.bmjournals.com/cgi/content/full/327/7414/s75>

BMJ 2003;327:s75 (6 September)

"Having acquired the appropriate attire you can start your day with taking blood from patients—there are no phlebotomists or nurses to help you out here. In Germany it is considered to be an activity of such great skill that a doctor is required."

<http://elternhaus-goettingen.de/krankenkassen.html>.

"Blutabnahme ist eigentlich eine ärztliche Tätigkeit, kann aber von ihm an eine Krankenschwester delegiert werden."

In Austria and in Switzerland, fully qualified nurses are allowed to take blood samples.

induced sputum

Fr: expectoration provoquée; expectoration induite

G: induziertes Sputum; provoziertes Sputum; forcierte Expektoration

sex workers; commercial sex workers CSWs

This is the WHO-approved, PC term for 'prostitutes'. [*Sex and Dating. The Official Politically Correct Guide*. H Beard & C Cerf. HarperCollins 1994:121-122 – "Since the word 'prostitutes' unfairly stigmatizes women forced by patriarchal capitalism to sell their bodies in order to eke out a living ... several less judgmental terms have been coined to replace it. Among the most useful: sex workers, sex care providers, sexual surrogates, and ... persons presenting themselves as commodity allotments within a business doctrine."]

The Beard & Cerf quote obviously misses out male prostitutes, who are included in the PC term 'sex workers'.

(Presumably, the much-maligned patriarchal system cannot be blamed for men prostituting themselves.)

Fr: travailleuses et travailleurs du sexe; travailleurs du sexe (found in one WHO text, where the masculine form applies to both genders – surely not very PC usage?)

Since Fr is a WHO language, the term is found in quite a few texts. However, there is at least one recent (2001) official Canadian Web site on which 'commercial sex workers' is used in the English-language version, and 'prostitué(e)s' is used in the French version of the same text.

The addition of 'commercial(e)' appears to be rare.

G: SexualarbeiterInnen (with the absurd, but PC, capital letter I inside the word)

Since German is not a WHO language, the term appears to be comparatively rare, except in Swiss texts. The English terms 'sexual worker' and 'commercial sexual worker' may appear in G texts, between inverted commas, and followed by the translation 'Prostituierte'.

quasispecies

Fr: quasi-espèces (virales)

G: Quasi-Spezies

Note: In Fr financial parlance, 'espèces et quasi-espèces' = 'cash and cash equivalents'.

DOT = directly observed therapy; DOTS = directly observed therapy short course

Fr: The abbreviation DOT (also written 'Dot') is used, as is DOTS. DOT is variously explained in Fr as 'traitement sous surveillance directe'; 'traitement sous supervision directe'; 'prise des médicaments sous supervision directe'; 'traitement directement supervisé ([o:] observé)'; 'surveillance du traitement'; 'traitement contrôlé'; 'prise contrôlée du traitement'; 'surveillance stricte de l'observance thérapeutique'. DOTS is explained as 'traitement court par observation directe'. 'Short course' = 'traitement dit court'.

G: DOT and DOTS are used. DOT is explained in G as 'streng überwachte Einnahme'; 'Einnahme unter direkter Beobachtung'; 'direkt überwachte Medikamenteneinnahme'; 'von Drittpersonen überwachte Behandlung'; and (comparatively rarely, seeing as the German term is, for once, being used in its traditional sense) 'kontrollierte Einnahme'. DOTS is explained as 'Kurzzeittherapie mit direkter Beobachtung der Medikamenteneinnahme'.

acid-fast bacilli AFB [*Mycobacterium tuberculosis*]

Fr: bacilles acido-alcool-résistants BAAR; Baar

G: säurefeste Stäbchen

WHO – World Health Organization

The -z- in the third part of the name is official, and should not be replaced by -s-, regardless of one's spelling preferences.

ICAMs

= intercellular adhesion molecules.

Fr: ICAM = molécules d'adhérence intercellulaire; molécules d'adhésion intercellulaire

Note: Purists prefer 'adhérence'; pragmatists use 'adhésion'. And never the twain shall meet.

G: ICAM = interzelluläre Adhäsionsmoleküle

Terminology from the French HIV/AIDS workshop text, contributed by Erline Lequeux

Line	FRENCH	ENGLISH	Comments
1	points forts	key points	
3	politique de dépistage	screening policy	
6	dynamique de l'épidémie; [dans le contexte] la dynamique de l'épidémie...n'est pas stoppée	epidemic dynamics; [in the context] HIV continues to spread unabated	
9	multipartenaires	people with multiple sex partners; people with multiple sexual partners	Note: In English, this could refer to "the promiscuous", but this term is felt by many to be derogatory.
	relâchent leur comportement de prévention	are becoming less careful about practising sex; high-risk behavior is increasing	
12	stratégies thérapeutiques actuelles	current therapeutic strategies; current treatment strategies	
13	infections opportunistes	opportunistic infections	For list and details see : http://www.aidsmeds.com/lessons/StartHere8.htm
15	file active	number	
16	infection par le VIH	HIV infection	

Line	FRENCH	ENGLISH	Comments
18	maladie chronique de longue durée	long-term chronic disease	
	prise en charge	management	
	stade tardif	advanced stage of the disease	
24	dispositif d'information épidémiologique	system of epidemiological information	
25	surveillance de l'infection par le VIH	HIV infection surveillance	
26	nouveau système de déclaration	new (mandatory) reporting system	
30	rétro-information	feedback	
31	systèmes d'information hospitaliers	hospital reporting systems	
34	MST = maladies sexuellement transmissibles	STDs = sexually transmitted diseases	
35	indicateur	indicator	
37	enquêtes comportementales	behavioral surveys	
38	personnes à risque sexuel	persons at risk of contracting sexually transmitted diseases	
40	VIH = virus d'immuno-déficience humaine; syndrome d'immunodéficience acquise	HIV = human immunodeficiency virus	
	SIDA = syndrome immuno-déficientaire acquis	AIDS = acquired immune deficiency syndrome	
41	décideurs	decision makers	
42	traitement antirétroviral	antiretroviral treatment	
44	essai thérapeutique contrôlé	controlled therapeutic trial	
	études de cohortes	cohort studies	
47	taux de lymphocytes T CD4	CD4/T-cell count; also called CD4 count	
51	efficacité antivirale	antiviral efficacy	
	nombre de prises et du nombre d'unités par prise	dose regimen and number of medications to be taken each time; the pill and liquid burden	
53	rythme de vie du patient	patient's lifestyle	
	effets indésirables	side effects; adverse effects	
54	interactions pharmacocinétiques	pharmacokinetic interactions	
57	charge virale plasmatique	plasma viral load	
	copies	copies	
58	trithérapie	triple therapy	
	IP = inhibiteur de la protéase	PI = protease inhibitor	For more information on HIV/AIDS drugs see: http://www.catie.ca/PG_HAART_e.nsf/ try also http://www.aidsmeds.com/List.htm
59	quadrithérapie	quadruple therapy; four-drug therapy	
61	trois combinaisons d'antiviraux	a combination of three antiviral agents	

Line	FRENCH	ENGLISH	Comments
	IN = inhibiteurs nucléosidiques de la transcriptase inverse; analogues nucléosidiques	NRTIs = nucleoside reverse transcriptase inhibitors; also called nukes	For more information on HIV/AIDS drugs see: http://www.catie.ca/PG_HAART_e.nsf/ try also http://www.aidsmeds.com/List.htm
	INN = inhibiteurs non nucléosidiques de la transcriptase inverse	NNRTIs = non-nucleoside reverse transcriptase inhibitors; also called non-nukes and non-nucleoside analogues	For more information on HIV/AIDS drugs see: http://www.catie.ca/PG_HAART_e.nsf/ try also http://www.aidsmeds.com/List.htm
63	co-infection	coinfection	
64	VHC = virus de l'hépatite C	HCV = hepatitis C virus	
	VHB = virus de l'hépatite B	HBV = hepatitis B virus	
67	molécules	drugs; agents	
73	méritent une vigilance particulière	need particularly close follow-up; need particularly close monitoring	
74	cytopathies mitochondriales	mitochondrial cytotoxicity	
	acidose lactique	lactic acidosis	
77	succès immuno-virologique	immunologic and virologic response	
79	dans un souci d'épargne thérapeutique	in the interest of a drug sparing therapy regimen	
	gestion	control	
89	contraignant	exacting	
90/93	échec des traitements; échec thérapeutique	failure of treatments; therapeutic failure	
97	mécanismes d'échappements	mechanisms of failure; ways in which drug resistance can develop	
98	observance (du traitement)	adherence; compliance	"Compliance" is now considered too dictatorial in the context of the individual patient, so "adherence" is more politically correct. "Compliance" encompasses the whole system, including availability and condition of drugs. <i>This aspect is discussed in detail in the German group's glossary.</i>
101	interactions médicamenteuses	drug interactions; drug-drug interactions	
103	concentration plasmatique d'antirétroviraux	plasma concentrations of antiretroviral drugs; plasma levels of antiretroviral drugs	

Line	FRENCH	ENGLISH	Comments
	tests génotypiques de résistance	resistance genotyping; genotype resistance test; genotypic antiretroviral resistance testing	Find more on drug resistance: http://www.aidsmeds.com/lessons/Resistance1.htm . Try also: http://www.catie.ca/PG_HAART_e.nsf/ then click Drug resistance in the list below. Website in both English and French.
104	réflexions multidisciplinaire	multidisciplinary discussions	
108	groupe transversal	cross-disciplinary group	
109	CISIH = Centre d'Information et de Soins de l'Immunodéficience Humaine	HIV information and care center	
110	réfèrent VIH	HIV specialist	
114	monothérapie	single drug therapy; monotherapy	
119	programmes spécifiques d'écoute et d'aide	specific counseling and support programs	
125	la reconnaissance et la gestion des effets indésirables	detection and management of adverse effects	
126	démarche d'accompagnement	support	
128	sous-évaluées	under-estimated	
129	soignants	health care workers; health care providers; health care professional	
133	perception des enjeux du traitement	understanding treatment issues	
134	la relation soignant-soigné	physician-patient relationship	
139	co-infection VIH-VHC/VHB	HIV-HCV/HBV coinfection	
144	test de résistance aux antirétroviraux	antiretroviral resistance test	
145	quasi-espèces virales	viral quasi-species	
148	la résistance in vivo	in vivo resistance	
	tests phénotypiques	phenotyping; phenotype tests	
150	mutants résistants	resistant viral mutations	
151	réplication virale	viral replication	
157	traitement de relais	new regimen following a change of treatment	
168	ADN proviral	proviral DNA	
172	compartiments génitaux	genital tract; genital compartment	
173	système nerveux central	central nervous system = CNS	
194	effets au long cours	long-term effects	
	syndrome lipodystrophique	lipodystrophy syndrome; fat redistribution syndrome	http://www.aidsmeds.com/lessons/Lipo1.htm ; http://www.catie.ca/sideeffects_e.nsf/
195	anomalies glucido-lipidiques	raised blood glucose and lipid levels	
202	HTA = hypertension artérielle	HBP = high blood pressure;	

Line	FRENCH	ENGLISH	Comments
		hypertension	
203	lipoatrophie	lipoatrophy	decrease in fat tissue
	lipohypertrophie	lipohypertrophy	accumulation in fat tissue
207	DEXA-scan	DEXA scan	stands for Dual Energy X-Ray Absorptiometry, a method of bone mineral density assessment.
212	atrophie graisseuse du visage	facial fat loss; facial wasting	
216	notification	reporting	
218	immunothérapie	immune therapy	
221	meilleur équilibre immunovirologique	better immunologic and virologic control	
	renforcement de la réponse immunitaire spécifique	enhancement of the specific immune response	
	immunisation thérapeutique	therapeutic immunization	
237	immunodéprimés séronégatifs VHC	seronegative HCV immunosuppressed	
	PCR = polymérase chain reaction	PCR = polymerase chain reaction	
241	les patients co-infectés virémiques	HIV-seropositive coinfectured viraemic patients	
243	génotype du VHC	HCV genotyping; HCV genotype testing	
250	bithérapie	dual therapy	
	mono-infectés	monoinfected patients	
251	éradication du VHC	HCV eradication	
252	immunodépression	immunosuppression	
257	patients VIH+	HIV positive patients	
258	infection par le VHB récente ou ancienne	recent or old HBV infection	
266	biopsie hépatique	liver biopsy	
269	patients co-infectés	coinfectured patients	
273	maladies opportunistes	opportunistic diseases	
274	SIDA inaugural	AIDS-defining illness; initial manifestation of AIDS	
281	cryptosporidioses	cryptosporidiosis	
	LEMP = leucoencéphalopathie multifocale progressive	PML = progressive multifocal leukoencephalopathy	
287	frottis	Pap smear	
	colposcopie	colposcopy	
288	femme porteuse du VIH	woman with HIV infection; HIV-infected woman	
289	dysplasies cervicales utérines	cervical dysplasia	
290	anuscopie	proctoscopy	
291	rapports sexuels anaux réceptifs non protégés	unsafe (or) unprotected anal-receptive sex (or) intercourse	
295	patients immunocompétents	immunocompetent patients	
305	durée de la protection	length of protection; duration of protection	
309	vaccin vivants atténués	live attenuated vaccines	Research on HIV vaccine at http://www.niaid.nih.gov/daids/

Line	FRENCH	ENGLISH	Comments
			vaccine/default.htm
310	déficit de l'immunité cellulaire	cellular immune deficiency	
311	restauration immunitaire induite	induced immune restoration	
312	meilleure réponse vaccinale	better response to vaccination	
317	fièvre jaune	yellow fever	
318	rapport bénéfice/risque	benefit/risk ratio	
320	primo-infection	primary (or) acute infection	
336	séroconversion	seroconversion	
346	essais thérapeutiques	clinical trials	
347	études épidémiologiques	epidemiological studies	
354	ARN-VIH-2 plasmatique	HIV-2 plasma RNA	
375	multithérapie	combination therapy	
378	bilan prénatal	antenatal care	
380	traitement préventif de la transmission du VIH de la mère à l'enfant	treatment preventing mother-to-child HIV transmission	
384	grossesse à risque	high-risk pregnancy	
405	pays de forte endémie	countries where HIV is highly endemic; areas highly endemic for HIV	
439/ 440	adhésion...au projet thérapeutique	adherence to the treatment plan	
468	contraception d'urgence	emergency contraception	
468	pilule du lendemain	"morning-after pill"	
474	désir d'enfant	HIV-infected persons wishing to have children (or) to have a family	
476	AMP = assistance médicale à la procréation	medically assisted procreation	
481	le projet parental...peut...être accompagné et orienté vers	couples seeking to have children may be helped by referring them to...	
482	couples sérodifférents ou séroconcordants	HIV-discordant couples or HIV-concordant couples; serodiscordant couples or seroconcordant couples; mixed-HIV-status couples or same-status couples	
499	IST = infections sexuellement transmissible	STIs = sexually transmitted infections	
504	non-échange des seringues et des pailles entre usagers de drogue	non-sharing among drug users of paraphernalia to inject or snort drugs; non-sharing by drug users of needles and snorting straws	
526	difficultés d'accès aux soins	difficulties to obtain access to care	
533	exclus sociaux	victims of social exclusion	
539	médiation culturelle	information and communication	
549	dengue	dengue fever	

Line	FRENCH	ENGLISH	Comments
570	carte de séjour temporaire avec autorisation de travail	temporary resident card with work permit	
576	CMU = Couverture Maladie Universelle	complementary health insurance for people with very low income, covering medical expenses not fully reimbursed by the French social security system. This also exempts a person from paying upfront fees for a consultation or medications (for information in French: http://www.social.gouv.fr/html/actu/index_cmu.htm)	Facts-line is an association providing counseling, support and education on HIV/AIDS to the English-speaking community. The following link will give you pertinent information on French social services, national health coverage, minimum income, disability pension, and a lot more: http://www.facts-line.com/publications/survival2.html
578	RMI = revenu minimum d'insertion	income support; minimum income	See the above Facts-line link
583	précarité	medical indigence	
586	sans couverture sociale	without social security protection (or) coverage	
587	personnes précarisées	the medically indigent	
590	service d'urgence sociale	emergency social services	
	AAH = allocation adulte handicapé	disability living allowance	http://www.facts-line.com/publications/survival2.html
600	COTOREP = Commission technique d'orientation et reclassement professionnel (http://vosquestions.service-public.fr/fiche/2980.htm)	Commission for occupational guidance and rehabilitation	For a HIV+ person, the disability level is 50% and 80% for a person with AIDS. http://www.facts-line.com/publications/survival2.html
605	GRTH = garantie de ressources travailleur handicapé (http://www.actupparis.org/article1361.html)		GRTH enables a disabled person to work part-time (mi-temps thérapeutique) if her/his health cannot allow normal work load. In case of repeat sick leave for the same reason, this also protects them against unfair dismissal. http://www.facts-line.com/publications/survival2.html
608	milieu carcéral	in the prison population	
610	UCSA = unités de consultation et de soins ambulatoires (http://www.ma-strasbourg.justice.fr/html/ucsa.htm)	unit of consultation and ambulatory care for prisoners	
631	PBH = ponction biopsie hépatique	liver needle biopsy	

{The terminology from the Russian group will appear in the next issue}

UNAIDS The Joint United Nations Program on HIV/AIDS

Glossary of AIDS-related terminology

http://www.unaids.org/Unaid/EN/Resources/Terminology/Glossary+of+HIV_AIDS-related+terms.asp

Terminology Database

http://www.unaids.org/Unaid/EN/Resources/Terminology/Search_term.asp

HIV/AIDS Resource Center

http://health.yahoo.com/health/centers/hiv_aids/index.html

AIDSMEDS.COM

Comprehensive and up-to-date information on the disease and available medicines. Very interesting information on opportunistic infections (OIs) with a link to each major OI and cancer than can occur during late-stage HIV disease, along with possible treatments.

<http://aidsmeds.com>

Go to lessons for details on the disease, treatment, opportunistic diseases and special issues:

<http://aidsmeds.com/lessons/StartHere1.htm>

Drug details:

<http://aidsmeds.com/List.htm>

FACTS-LINE

<http://www.facts-line.com/>

Association providing counseling, support and education on HIV/AIDS to the English-speaking community in France.

The following link will give you pertinent information on French social services, national health coverage, minimum income, disability pension, and a lot more:

<http://www.facts-line.com/publications/survival2.html>

Research on HIV vaccine

<http://www.niaid.nih.gov/daids/vaccine/default.htm>

BILINGUAL WEBSITES (EN-FR)

Health Canada – Santé Canada

HIV/AIDS and you

http://www.hc-sc.gc.ca/hppb/hiv_aids/you/index.html

CATIE

<http://www.catie.ca/>

The Canadian AIDS Treatment Information Exchange is a national, non-profit organization committed to improving the health and quality of life of all Canadians living with HIV/AIDS. CATIE provides treatment information not only for people living with the virus but also for their families, care providers, AIDS Service Organizations and Health Care Intermediaries.

German Group

Empfehlungen zur antiretroviralen Therapie bei HIV-infizierten Kindern

Vollständig überarbeitetes und aktualisiertes Konsensusstatement der Pädiatrischen Arbeitsgemeinschaft (PAAD) und der Deutschen Gesellschaft für Pädiatrische Infektiologie (DGPI)

T. Niehues et al. *Monatsschrift Kinderheilkunde* 2001;149:1372-82.

<http://www.dgpi.de/Publikation/PDFs/mokiartikel.PDF>

This is a list based upon a study of the English-language references (in particular, [Ref 38] – the US Guidelines), and of national formularies, relevant textbooks, and selected Internet sources.

Unless otherwise indicated, the translations offered refer exclusively to the sense in which the source language terms are being used in the text. Translations that may appear unusual are marked [here:] and/or give the Reference in which the particular term or phrase was found.

Inflected German nouns that do not form part of a phrase are shown in the nominative.

Some aspects (compliance/adherence; INN and brand names; ® vs TM; the “no grapefruit juice with indinavir” instruction; dynamics of HIV/AIDS terminology) are discussed in separate Notes at the end of the glossary.

[o:] = oder/or; [occ] term occasionally found in the literature; [sl] = slang; BrEn = British English; AmEn = American English; [sing] = singular; () = longer version; [] = explanatory remarks/context • = additional terminology

BrEn spellings (e.g. ‘anaemia’) and suffix conventions (e.g. ‘virological’, rather than AmEn ‘virologic’) have been used. Interestingly, the US Guidelines [Ref 38] use ‘analogues’ rather than ‘analogs’.

Lines are numbered as in the text studied at the MTW; if following the text on the Internet, please note that, in the MTW text, L 380 starts “behandelte HIV-infizierte Kinder”, and L 390 is “Unterstützung” (IAW, there is a numbering error, involving a “jump” from 380 to 390, without an intervening 385 numbering).

No page breaks have been inserted into the glossary. If the glossary is to be printed out, care should be taken to avoid page breaks across individual items.

3-5	Empfehlungen zur antiretroviralen Therapie bei HIV-infizierten Kindern	guidelines for the use of antiretroviral agents in paediatric HIV infection; guidelines for antiretroviral use in paediatric patients <u>Notes:</u> (1) These translations follow the title of the US guidelines and a note in these guidelines [Ref. 18]. (2) The equation “Empfehlungen = Guidelines” is borne out by Lines 285-6. (3) ‘paediatric’ is preferable to ‘children’, since dosage guidelines refer to infants, children, and adolescents. ([Ref 38] repeatedly mentions ‘infants, children, and adolescents’.)
6-7	überarbeitetes und aktualisiertes Konsensusstatement	revised and updated consensus statement
7	Arbeitsgemeinschaft	Working Group
8	Gesellschaft für pädiatrische Infektiologie	Paediatric Infectious Diseases Society <u>Note:</u> This translation is patterned on the name of a society in the US.
9	Zusammenfassung	abstract; summary
10-11	effektive antiretrovirale Kombinationstherapie	effective ([o:] efficacious; potent) combination antiretroviral therapy; highly active antiretroviral therapy HAART
11-12	klinisches Erscheinungsbild	clinical pattern
13	Immundefekt	immune deficiency
14-15	lebensbedrohliche opportunistische Infektionen	life-threatening opportunistic infections
15-16	behandelbar	treatable
17	Grundlagenforschung	basic research; laboratory research [Ref 38]
17-18	aktuelle klinische Studien	current clinical trials
18	belegen	to demonstrate, to show; to document
19	Eradikation	eradication
22	Viruslast	viral load; [occ] viral burden; viral level

22-23	langfristige Nebenwirkungen	long-term toxicity; long-term toxicities; long-term adverse effects; long-term side effects <u>Note:</u> For what, in German, would be ‘Nebenwirkungen’, the US June 2003 Guidelines [Ref 38] use ‘side effects’, ‘adverse side effects’, ‘adverse effects’, ‘toxicity’, and ‘toxicities’.
23-24	nicht ausgeschlossen werden können	may be associated with
24-25	besteht berechnete Hoffnung	there is a reasonable prospect; it is reasonable to hope
28-29	die Therapieerfolge langfristig beibehalten	to maintain benefit in the long term
30	Ansatz	approach; concept
31	Therapiestrategie	treatment strategy
34	Indikation	indications; [here:] initiation <u>Note:</u> A verbal construction along the lines of ‘when to start’ (and, similarly, ‘when to change’) may be preferable.
35	Durchführung	treatment regimens
	Therapiebegleitung	drug level and adherence monitoring <u>Note:</u> ‘Therapiebegleitung’ could be ‘supportive care’, which involves many aspects, including nutritional support and accompanying the dying patient. According to the senior author, and as used in the authors’ Abstract, the meaning is that of ‘monitoring’ (therapeutic drug monitoring; monitoring of adherence).
35-36	Initialtherapie	initial (antiretroviral) therapy
36-37	Therapieumstellung der antiretroviralen Therapie	changing ([o:] switching) antiretroviral therapy; modification of antiretroviral therapy
37-38	vor dem Hintergrund der neuen Erkenntnisse	in the light of recent knowledge <u>Note:</u> AmEn texts tend to use ‘in light of’, rather than ‘in the light of’.
39 & 41	legt vor	presents
40-41	HIV-Infektion im Kindesalter	paediatric HIV infection; HIV-infected paediatric subjects
42	Schlüsselwörter	key words
44	vertikale Transmission	vertical transmission
45	Medikamenteninteraktionen	drug interactions; drug-drug interactions
47	Grundlagen	background
48	Einführung	advent; introduction
51	Viruslastreduktion	viral load reduction; reduction in viral load; viral load suppression; suppression of viral replication
52	Immunrekonstitution	immune reconstitution; immune repopulation; reconstitution of CD4 cells
53-4	humanes Immundefektvirus	human immunodeficiency virus
54	Jugendliche	adolescents
55	Inzidenz	incidence [= number of new cases during a given time interval]
56-58	Aids definierende Erkrankungen	AIDS-defining (clinical) conditions; AIDS-defining illnesses; AIDS-indicator conditions ([o:] diseases); diseases indicative of AIDS
58	im Kindesalter	in paediatric subjects
62	Stand	as of
64	im Vergleich zu	as against
65	in der Ära vor	prior to
66-67	hochaktive antiretrovirale Kombinationstherapien	combination highly active antiretroviral therapy HAART <u>Note:</u> HAART is pronounced to rhyme with ‘smart’.

70-72	Prävention der HIV-Transmission von der Mutter auf das Kind	prevention ([o:] reduction) of maternal-infant transmission of HIV; prophylaxis ([o:] chemoprophylaxis) to reduce the risk of HIV transmission from mother to child ([o:] of mother-to-child transmission of HIV)
73-74	Charakteristika	pattern
76	Transmissionsprophylaxe	prevention of transmission; reduction of transmission; transmission prophylaxis
77-78	Transmissionsrate	transmission rate
78-79	entwickelte Länder	industrialized nations; industrialized countries; developed countries <u>Note:</u> 'Developed' is deprecated by some, as a non-PC term.
82	Neuinfektionen	new cases
82-84	wenn der HIV-Status der Mutter in der Schwangerschaft unbekannt bleibt	where the mother's (HIV) serostatus during pregnancy was not known; if the mother's HIV infection was not recognized during pregnancy; if the mother was not known to be HIV positive until the time of delivery
85-86	mangelhafte Compliance	poor compliance; adherence problems; inconsistent adherence; inadequate adherence; incomplete adherence <u>Note:</u> While 'compliance' is felt by many to be non-PC (because it implies the patient bending to the doctor's will), [Ref 38] and the later (June and September 2003) versions of the US Guidelines use both 'compliance'/'compliant' and 'adherence'/'adherent'. The yet more recently proposed term 'concordance' is conspicuously absent. [See separate Note at end of glossary]
87-88	Herkunftsland	country of origin
89	Zugang	access
92-93	Infektionsweg	route of infection
93	Virusdynamik	virus dynamics; viral dynamics
93-94	Reife des Immunsystems	maturity of the immune system; immune system maturity
94-95	natürlicher Verlauf	natural course; natural history
95-96	Erwachsenenalter	adulthood; in adults
96	Charakteristika	factors
97-98	auf das Kindesalter abgestimmte Therapie	treatment appropriate for paediatric patients; paediatric-specific therapy
99-100	Indikationsstellung	decision when to start therapy
100	Therapiedurchführung	regimens
101	Therapieumstellung	changing therapy; switching therapy; alteration ([o:] modification) of therapy
103	Ambulanz	clinic; outpatient clinic; outpatient department
103-104	pädiatrische Immunologie und Rheumatologie	paediatric immunology and rheumatology
104	Kinderheilkunde	paediatrics
108	zusammengefasst	collated
109-110	erfreut sich an einem extremen Wissenszuwachs	is experiencing an explosive increase in knowledge
110-112	wie kaum ein anderes Gebiet der Grundlagen- und klinischen Forschung	almost unparalleled in laboratory and clinical research
113-114	regelmäßige Überarbeitung	revision at regular intervals
118	Treffen	meeting
119	mit dem Ziel	with a view to
121	soweit angemessen	where appropriate
121-122	vereinfachen	to simplify

122	nach Erstellung	once drafted
125	abgestimmt	harmonized; agreed
130	Expertengremium	group of experts; group of specialists
131	Kinderärzte	paediatricians
134	Zentren	centres
		<u>Note:</u> ‘Centre’ may also be used as a translation of G ‘Haus’, in phrases such as ‘an unserem Haus’, where the meaning is that of ‘hospital’.
1139	antiretrovirale Medikamente	antiretroviral drugs; antiretroviral agents
141-142	Kombinationstherapien	combination regimens
143-144	rationale Auswahl	evidence-based choice
147-148	Dosierung	dosages and dosing schedules ([o:] medication schedules)
148	Darreichungsform	pharmaceutical form; dosage form; [US Guidelines] formulation; [occ] preparation [“a liquid preparation is currently under study”]
150	Eradikation	eradication
151	zu Beginn der Ära	when ... first came in
153-155	hochaktive antiretrovirale Therapie HAART	highly active antiretroviral therapy HAART
156	Halbwertszeit	half-life; [here also:] life-span
		<u>Note:</u> Both terms occur in [Ref 30].
160	wird davon ausgegangen	it is assumed
161	z.Z. [= zur Zeit]	currently
163-164	nicht messbare Viruslast	levels below the threshold of detection; undetectable plasma levels
164-165	ständige Virusreplikation	ongoing replication; persistent viral replication; residual HIV-1 replication; replication-competent viruses will persist
165-166	lymphatisches Gewebe	lymphoid tissues
166-167	diese Erkenntnis hat zur Folge, dass	this means that
168	Nutzen und Risiko	benefits and risks
169	neu abgewogen	analyzed anew; re-analyzed
171	Viruslastsuppression	viral load suppression
172	Therapieversagen	therapeutic failure; failure of regimen
173	Selektionsdruck der ...	selection pressure exerted by ...
173-174	patienteneigene Immunantwort	patient’s immune response
175	hochaktive ART	HAART
	ART	ART [= antiretroviral therapy]
176-177	Resistenzentwicklung	development of resistance; emergence of resistance
180	bereits	as early as
183	unter Therapie	during treatment; while on therapy; in patients undergoing treatment
185	der überwiegende Anteil	most; the majority
186-187	[befindet sich in einem] immunologisch und klinisch stabilen Zustand	are immunologically and clinically stable
188	Hinweise	evidence
188-189	Krankheitsprogression	disease progression
192-193	prognostische Bedeutung	prognostic significance
193	residuale Virusreplikation	residual virus replication; residual HIV replication
196	Meldung	reporting
197	Therapieregister	treatment registry
203-204	Beobachtungsdauer	follow-up
207	im Erwachsenenalter	in adults
208-209	Proteaseinhibitoren PI	protease inhibitors PIs
	• Proteasememmer	
210	Fettverteilungsstörungen	fat maldistribution; fat redistribution; changes in body fat distribution

211	Lipodystrophie	lipodystrophy
	Lipoatrophie	lipoatrophy
212	Hyperlipidämie	hyperlipidaemia
	Dyslipidämie	dyslipidaemia
214	unverstanden	not understood
214-216	nukleosidische Reverse-Transkriptase-Inhibitoren NRTI • Nukleosidanaloga – [sing] Nukleosidanalogon; nukleosidanaloge Reverse-Transkriptase-Hemmer	nucleoside analogue reverse transcriptase inhibitors NRTIs; nucleoside analogues [sl] nukes
216-217	mitochondriale Funktionsstörung	mitochondrial dysfunction; mitochondrial toxicity
218-219	neuromuskuläre Funktionsstörungen	polyneuropathy and myopathy [Ref 4]
219	Kardiomyopathie	cardiomyopathy
220	Panzytopenie	bone marrow suppression [Ref 4]
	Pankreatitis	pancreatitis
221-224	wird ... im Kindesalter ... in den meisten Fällen gut vertragen	paediatric patients tend to tolerate ... well; tends to be well tolerated by paediatric patients
226	Laborveränderungen	changes in laboratory parameters
226-227	Hyperlipidämien	hyperlipidaemia
229-230	bei derzeitigem Kenntnisstand	in the present state of knowledge; at the present state of (our) knowledge
229-231	von einer lebenslangen HAART auszugehen ist	it must be assumed that lifelong administration of HAART will be necessary ([o:] that life-long HAART will be required; that patients will have to remain on HAART indefinitely)
231-234	die Langzeitfolgen sind nicht absehbar	it is impossible to tell what the long-term effects will be
235	Indikation zur HAART	indication for HAART <u>Note:</u> This subheading could also be rendered as 'When to start and how to treat'
237	unerlässliche Voraussetzung für den Einsatz antiretroviraler Medikamente bleibt ... die zweifelsfrei gesicherte Diagnose einer HIV- Infektion	prior to the initiation of ART, the patient must have been reliably diagnosed as being infected with HIV ([o:] HIV infection must have been reliably diagnosed)
242-245	konnte eindeutig und übereinstimmend eine inverse Beziehung belegt werden	there is agreement on a proven inverse relationship; there is agreement that higher levels correlate with more rapid disease progression
248	virologische Befunde	viral levels; virological parameters
247-249	kann sich ... die Indikation für eine antiretrovirale Therapie ergeben	ART may be indicated
251-252	eine um etwa 1 Zehnerpotenz höhere Viruslast	an about tenfold greater viral load
254-255	wird ... Rechnung getragen	is taken into account
256	alterabhängig abgestuft	age-related levels; age-specific reference values
260-261	lebenslang notwendige Therapie	need for life-long treatment; need for indefinite treatment; life-long administration of therapy may be necessary
262-263	Therapiekombinationen	antiretroviral combinations
265-266	vorzeitiger "Verbrauch" effektiver Therapiekombinationen	using up future treatment options; reducing subsequent treatment options; limiting subsequent treatment options; limiting the patient's future options for potent therapy; "knocking out" future options
267	wenig sinnvoll	unreasonable; not advisable
268	wurde der Konsens erreicht	it was agreed
270	Anheben der Viruslastgrenzwerte	to raise the viral level thresholds; to raise the viral level cut-off points (above which therapy should be recommended)
273	asymptomatische Kinder	asymptomatic paediatric patients

274-275	ohne Immundefekt	with normal immune function; without evidence of immune compromise; with normal immunological status
276	warten	to defer; to delay; to postpone
278-279	Progressionsrisiko	risk of disease progression
279-280	in einem Zeitraum von 5 Jahren	during a 5-year follow-up ([o:] over a 5-year study period)
282-283	bei der Indikation zur initialen Therapie	in deciding when to start ([o:] to initiate) ART
287	Konsens ist, dass	there is consensus that
289	sinnvoll	advisable
292	Neugeborenes	neonate; newborn
292-293	Medikamentenanamnese der Mutter	the antiretroviral regimen previously received by the mother; previous antiretroviral use by the mother; prior maternal therapy with antiretroviral agents; history of maternal antiretroviral therapy
294-295	Resistenzen gegenüber mütterlicher ART übertragen werden können	resistant strains may be transmitted from mother to child; there may be vertical transmission of resistant virus
300-301	Pharmakokinetik im Kindesalter	pharmacokinetics in paediatric subjects
301	wenig Daten vorliegen	data are limited; there are only limited data
304	im Neugeborenenalter	in neonates; during the neonatal period
305-306	im Säuglings- und Kindesalter	in infants and children; in infancy and childhood <u>Note:</u> In medical parlance, 'infant' is a strictly defined term (= under 12 months of age).
310	um ein Vielfaches höher	several times higher
312-313	auf eine schlechtere Prognose hinweist	any correlation with a more rapid disease progression
315-316	Kopien/ml	copies/mL <u>Note:</u> The use of a capital, rather than a lower-case, letter L is useful, to avoid confusion when using a sans-serif font.
316	bDNA	bDNA branched-chain DNA
321	Richtwerte	intended for general guidance only; intended only as a guide
322-323	durch klinische Studien abgesichert	evidence-based; fully established in definitive clinical trials
325	Bestimmungsmethode	assay
326-327	RT-PCR	RT-PCR reverse transcriptase polymerase chain reaction
327-328	Roche Diagnostics	<u>Note:</u> In the peer-reviewed English-language literature, it would be customary to specify the manufacturer's address (place/state/country).
328-329	doppelt so hohe Werte ermittelt werden wie mit	yields values twice those obtained with
330	bDNA-Assay Chiron Corp.	bDNA assay; branched-chain DNA assay <u>Note:</u> In the peer-reviewed English-language literature, it would be customary to specify the manufacturer's address (place/state/country). Also, 'Corporation' would be spelt out in full.
334-335	Messung zweier unabhängig voneinander entnommener Blutproben	assaying two separately obtained blood samples
336	Blutuntersuchungen	determinations; measurements
337-339	im Abstand von mindestens 14 Tagen zu einer Infektion oder Impfung	with a minimum of two weeks from any intercurrent infection ([o:] any infectious episode) or the receipt of vaccinations
341-342	Aktivierung HIV-infizierter Zellen	activation of HIV-infected cells
343-344	immunologische und klinische Kriterien	immunological and clinical criteria; immunological and clinical parameters

345	Risiko, an Aids zu erkranken	risk of developing AIDS
346	Mortalität	mortality
347	CD ₄ -Zellzahlen	CD4 ⁺ T-cell count; CD4 count
352-353	immunologische Kategorien 2 und 3	Immune Categories 1 and 2
353-354	klinische Kategorien B und C	Clinical Categories B and C
354	unabhängig von	regardless of
360	gemäß	as a function of
361	Kategorien N1 und A1	Categories N1 and A1
364	Therapie bei	treat if
368	Minimalkonsens	agreed minimum
369	kann ein großzügigeres Vorgehen gerechtfertigt sein	a lower treatment threshold may be warranted; it may be reasonable to start treatment at lower viral loads; more aggressive treatment may be warranted
371	Didanosin	didanosine
	Stavudine	stavudine
	Note: The usual German INN is 'Stavudin'.	
372	Nelfinavir	nelfinavir
	Zidovudine	zidovudine
	Note: The usual German INN is 'Zidovudin'.	
	Lamivudine	lamivudine
	Note: The usual German INN is 'Lamivudin'.	
	Nevirapin	nevirapine
376-377	Langzeitstudien zu HAART	long-term studies of HAART
378	Stadien	Categories
377-379	kann nicht ... geraten werden	cannot be recommended
380-381	bedürfen regelmäßiger Kontrollen	should be followed up at regular intervals; will need to be followed up at regular intervals; will require frequent monitoring
383	Therapieziele	treatment goals
384-390	Therapie begleitende Unterstützung	monitoring
[sic]		
391	Behandlungsziel	treatment goal
392-393	Schäden am Immunsystem	damage to the immune system; immune system destruction
393-394	Virusnachweisgrenze	virus detection limit; limit ([o:] threshold) of detection
395	Testverfahren	assay
396	hochsensitiv	highly sensitive
396-397	Nachweisgrenzen	limits ([o:] thresholds) of detection
400	HIV-RNA-Konzentration im Plasma	plasma HIV RNA levels
401	unter die Nachweisgrenze zu drücken	to suppress below the limit ([o:] threshold) of detection; to reduce ([o:] suppress) to below detection; to suppress to undetectable levels; to suppress to levels below quantification
403-404	lebenslang aufrecht zu erhalten	to maintain indefinitely
411-412	Compliance oder Therapieadhärenz	adherence
	• Therapietreue; Einnahmезuverlässigkeit	Note: Usage is discussed separately, at the end of the glossary.
412	Einhaltung	ability to follow; continuation
412-414	gemeinsam von Patient/Familie und Behandler definierte Therapieziele	(medication) treatment plan agreed upon ([o:] undertaken] by the patient/caregiver ([o: patient/family) and the health care provider
		Note: Since not all HIV-infected children are cared for in a family setting, some authors prefer the term 'caregiver(s)'.
419	NRTI-Monotherapie	single-NRTI therapy; single-agent NRTI therapy; treatment with a single NRTI; NRTI monotherapy
	nicht mehr zu empfehlen	no longer recommended

421	primär	wherever possible
422	kooperative klinische Studien	collaborative clinical trials; multi-centre clinical trials
424	kommt dies nicht in Frage	where this is not an option
426	Zidovudin	zidovudine
427	Zalcitabin	zalcitabine
	Lamivudin	lamivudine
	Stavudin	stavudine
	Abacavir	abacavir
	Ritonavir	ritonavir
428	Saquinavir	saquinavir
	Indinavir	indinavir
	Amprenavir	amprenavir
	Lopinavir/Ritonavir	lopinavir/ritonavir
428-429	NNRTI nichtnukleosidischer Reverse-Transkriptase-Inhibitor; nicht Nukleosid-analoger Reverse-Transkriptase-Hemmer	NNRTI non-nucleoside reverse transcriptase inhibitor; non-nucleoside analogue
429	Delavirdin	delavirdine
430	Efavirenz	efavirenz
431	Resistenzentstehung	development of resistance; emergence of resistance
432	Versagen	failure
434	Motivation	motivation; encouragement <u>Note:</u> Where 'Motivation' refers to the patient's general desire or willingness to continue with the treatment, rather than to the stimulation of that willingness by the physician, only 'motivation' can be used.
	Eltern	caregivers <u>Note:</u> The US guidelines do not use 'parents', presumably because not all children are looked after by their parents.
436-437	anhaltende Unterdrückung der Virusreplikation	sustained control of viral replication
438-439	Modalitäten der Medikamenteneinnahme	details of the prescribed regimen; details of when and how to take the drugs ([o:] the medications)
440	detailliert abgesprochen	[details] will need to be agreed
440-441	dem Tagesablauf ... angepasst sein	to fit into the daily routine
442	Medikamentenpläne	(daily) schedules
	altersgerecht	age-appropriate
443-444	Wirkungsweise	mechanism of action; mode of action; [here:] how the drugs work <u>Note:</u> Maggie favours 'mechanism ([o:] mode) of action, given that this text is addressed to health care professionals. Karin favours 'how the drugs work', since the cartoons in question are addressed to the lay level. Maggie and Karin have agreed to differ.
444-445	die Bereitschaft zur Compliance fördern	improve adherence; serve as adherence tools
446-448	stellt sich ... als besonders problematisch dar	is especially problematic
447	Pubertät	puberty
450-451	Behandlungsteam	multidisciplinary team approach
451-452	Pflegepersonal	nurses; nursing staff
452	Sozialarbeiter	social workers
453-454	Beurteilung der Compliance	adherence assessment
455	Evaluierung	evaluation; assessment
	Fragebögen	questionnaires

455-457	elektronische Registrierung der Medikamentenabgabe	pill bottles fitted with electronic caps [Ref 1]; devices which electronically record the opening of the container <u>Notes:</u> (1) While the pill as a drug dosage form is now obsolete, the term lingers on, and is found quite frequently in the HIV literature ('pill burden' = the number of tablets or capsules that have to be taken daily; 'pill count' = (a) counting the number of tablets etc. left at the next follow-up, (b) = daily number of tablets etc.; 'pillbox'; 'pill formulations' = solid dosage forms). (2) One electronic system is known as the MEMS – Medication Event Monitoring System.
457-458	Resistenzuntersuchungen	resistance assays; resistance tests; resistance testing
459-460	Therapiesteuerung	management of the therapeutic regimen
460-462	therapiebegleitende Plasmaspiegelbestimmungen der Medikamente	therapeutic drug monitoring TDM; monitoring of plasma drug levels
465	Einschätzung	assessment
465-466	Effektivität	effectiveness <u>Note:</u> Since this is under conditions of general use, it is 'effectiveness'; 'efficacy' is under clinical trial conditions.
466-467	patientenspezifische Pharmakokinetik	patient-specific pharmacokinetics
467	potentielle Toxizität	potential adverse effects; potential toxicity
469	Stellenwert	utility; role
472	überprüft	studied; evaluated
476-477	lebenslange Dauertherapie	life-long treatment; lifelong administration of therapy; indefinite treatment
477-478	Unterbrechung der Therapie	interruption of treatment
478-479	inkonsequente Durchführung	inconsistent adherence
479-480	verursacht möglicherweise größere Schäden	may do more harm
480-481	der vorläufige Verzicht auf Behandlung	temporarily withholding treatment
483-484	Aussetzen der Therapie	treatment interruption; cessation of HAART; discontinuing HAART; stopping antiretroviral medication
484-485	strukturierte Therapieunterbrechungen	structured treatment interruptions; scheduled ([o:] strategic) treatment interruptions STI
486	"drug holidays"	"drug holidays"
490	virulenter Wildtyp	virulent wild type
491-492	Abnahme der CD ₄ -Zellen	CD4+ T cell decrease; decline in the CD4+ T cell count; CD4 cell numbers are likely to fall
498-499	Therapie mit 2 nukleosidischen Reverse-Transkriptase-Inhibitoren	dual nucleoside combination therapy; dual nucleoside analogue regimen
503	größere Effektivität hat als ...	is associated with superior virological response compared with ... [Ref 25]
504	Zweierkombination aus 2 NRTI	dual nucleoside combination therapy; dual nucleoside analogue regimen
507	2 Substanzklassen	two classes of antiretroviral drugs; two drug classes <u>Note:</u> In the peer-reviewed English-language literature, numbers from one to ten (or, in some journals, eleven or twelve) should be written out, except when used with a percent sign or a unit of measurement such as cm.
510-511	NNRTI nichtnukleosidale Reverse-Transkriptase-Inhibitoren <u>Note:</u> It would appear that there are two different adjectival endings – cf. LL 428-429.	NNRTIs non-nucleoside reverse transcriptase inhibitors; non-nucleoside analogue
514	Kreuzresistenzen	cross-resistance(s)

518	bessere Wirksamkeit der Therapie	more effective treatment; a better response
519-520	neu mit HAART behandelte Kinder	HAART-naïve paediatric HIV patients; HIV-infected paediatric subjects not previously treated with HAART <i>Note:</i> Both 'naïve' and 'naïve' are in <i>The New Oxford Dictionary of English</i> .
529	Erfahrungen	experience
530-531	in ein zukünftiges Behandlungskonzept einfließen	to be used in the design of future regimens
533	kontrollierte Bedingungen	controlled conditions
	<i>Note:</i> In this instance, 'kontrolliert' is being used in an inherently non-German sense – the true German meaning of 'kontrollieren' is 'to monitor', 'to check.' The term is found increasingly in the sense of En 'to control', which implies influencing something, rather than just keeping an eye on something.	
537	Dreifachtherapie	three-drug regimen; triple regimen; triple-drug combination regimen; triple therapy
538	ohne Vortherapie	previously untreated; ART-naïve
543	geklärt	established
544-545	am wirkungsvollsten	the most effective
545-546	im Hinblick auf Folgetherapien am sinnvollsten	leaves the most future treatment options open
547	Wirksamkeit	efficacy <i>Note:</i> The reference is to clinical trials.
549	veröffentlichte Studien	published trial results; trial results in the literature
551	Zulassungssituation	whether the drug has been licensed for use ([o:] has been approved)
554-555	in den USA zugelassene Medikamente	drugs licensed ([o:] approved) in the US only
555-556	spezielle Einverständniserklärung	special consent
557-561	die Wahl ... sollte sich in erster Linie ... nach ... richten	the choice should be guided primarily by
559	Verträglichkeit	tolerability; side effect profile <i>Note:</i> 'tolerability' is being increasingly used in the English-language literature, and is a handy way of rendering 'Verträglichkeit'
560-561	dauerhafte Compliance	sustained adherence
563	Körpergewicht	body weight
563-564	Einzelsubstanz	drug
564	Tabl.	pills; tablets <i>Note:</i> Since it is obvious from the table on p 1378 that some of drugs come as capsules, 'Tabletten' is being used as a general term to denote solid dosage forms. Therefore, the use of 'pills', discussed above (LL 455-457), would be appropriate. The "hidden word" behind this sentence is 'pill burden'
564-565	in gelöster oder ungelöster Form	taken whole or dissolved
567	sind es	the pill burden is
568-570	es ist sinnvoll ... durchzuführen	it is advisable to determine ...; it is recommended to determine ...; ... should be determined
568-569	in größeren Abständen	at 3–4-monthly intervals; three or four times a year
569-570	Plasmaspiegelbestimmungen durchzuführen	to determine ([o:] to measure; to assay) plasma levels
570	Einnahmefehler	adherence problems
571	Unterdosierungen	subtherapeutic levels
572-573	mehrtägige stationäre Aufnahme der Patienten	hospitalizing patients for several days; in-patient admission for several days; patients may need to be admitted for several days

573-574	bei Therapiebeginn oder bei einem Therapiewechsel	when treatment is being started or changed; when new medications are being started or when current regimens are being altered
575-576	Kontrolle der richtigen Einnahme <u>Note:</u> In this instance, 'Kontrolle' is being used in its traditional German sense.	to monitor adherence
576	geschult	skilled
578-580	medikamentenassoziierte allergische Reaktionen	allergic drug reactions
580-581	gemäß § 39 SGB V <u>Note:</u> the § sign is pronounced 'Paragraph'	under Part V Section 39 of the (German) Social Code
581-582	vollstationäre Behandlung	in-patient treatment <u>Note:</u> Section 39 states that in-patient treatment is permitted only where day hospital care ('teilstationäre Behandlung') or outpatient treatment ('ambulante Behandlung') are insufficient. The message is that in order to establish/monitor adherence, the patient has to be admitted as an in-patient; attendance at a day hospital (returning home at night) or at an outpatient clinic would not be enough.
584	Einsatz	use
585-586	optimale Plasmaspiegel	optimal plasma levels
587	aufgeführt	listed
592	Retrovir	Retrovir
593-594	Epivir	Epivir
594	KG [= Körpergewicht]	BW [= body weight]
594-595	Kombinationspräparat	fixed-dose combination; fixed-dose formulation
595	Combivir	Combivir
596-597	die tägliche Tablettenmenge	the (daily) pill burden
598	Zerit	Zerit
599	Videx	Videx
600-601	gleichwertig	equivalent
601	in jüngster Zeit	recently
603	Ziagen	Ziagen
606	Gefahr	risk
606-607	Hypersensitivitätsreaktion	hypersensitivity reaction
607	unter Abacavir	on abacavir therapy; in patients receiving abacavir
610	gut aufgeklärt	fully informed
611-612	bei Auftreten der Hypersensitivitätsreaktion	if a hypersensitivity reaction occurs; in patients with a hypersensitivity reaction
613	dauerhaft abgesetzt werden	stopped and not restarted
614	Wiederansetzen	rechallenge
614-615	potenziell fatal verlaufen kann <u>Note:</u> 'fatal' is an Anglicism. The native meaning of the German adjective is 'awkward', 'embarrassing', 'fateful'. 'Letal' would have been a better choice.	potentially fatal; which may be fatal; (potentially) life-threatening <u>Note:</u> There is no need to match the infelicitous pattern of the German sentence (which could do with having the 'potenziell' deleted). Either 'may' or 'potentially' would be enough.
615	ggf. [= gegebenenfalls]	[here:] may ['in-patient monitoring may be useful']; should ['in-patient monitoring should be considered']
615-616	mit dem Beginn der Abacavir-Therapie	when instituting treatment with abacavir <u>Note:</u> A different construction may be useful: 'Patients who are being put on abacavir'
616	bzw. [= beziehungsweise]	or

616-17	bei fraglichen Überempfindlichkeitsreaktionen	if a hypersensitivity reaction is suspected <u>Note:</u> If the alternative construction suggested above is being used, the sentence could continue with: ‘who are suspected of having a hypersensitivity reaction’
618	stationäre Überwachung	in-patient monitoring; should be admitted for monitoring
	sinnvoll	useful; advisable; should be considered
622	überlegen	superior
619-623	ob ... lässt sich nach dem derzeitigen Wissensstand nicht beantworten	in ([o:] at) the present state of (our) knowledge, it is impossible to tell whether
631-632	isoliert mit einem NNRTI	with an NNRTI as the sole antiretroviral agent; using a regimen consisting of a single NNRTI; with NNRTI monotherapy
635-636	Hemmung der Virusreplikation	suppression of viral replication
635-637	sodass ... gewährleistet ist	to ensure
637	Halbwertszeit	half-life; plasma half-life
639-640	einmal am Tag ... eingenommen	administered once daily; once-daily dosing; QD dosing; OD dosing
	vorzugsweise abends	preferably administered ([o:] taken) at bedtime; bedtime dosing is recommended
642	Gesamttherapie	the regimen overall
644	ZNS-Symptome [ZNS = Zentralnervensystem]	CNS symptoms [CNS = central nervous system] [here:] neuropsychiatric side effects; CNS and psychiatric symptoms
	Schwindel	dizziness <u>Note:</u> ‘Dizziness’, rather than ‘vertigo’.
645	Alpträume <u>Note:</u> It is difficult to determine whether this is the prescribed spelling (following the <i>Rechtschreibreform</i>), or whether both ‘Alpträume’ and ‘Alpträume’ are permitted spellings. The ‘Alb-’ version is considered by some to be etymologically more correct; however, both the 1989 <i>Duden Universalwörterbuch</i> and the 1966 <i>Brockhaus</i> list both ‘Alb’ and ‘Alp’ as spellings of the goblin that gives people nightmares.	abnormal dreams <u>Note:</u> This term is found consistently in the efavirenz literature.
645-646	depressive Stimmungslage	depression
648-649	verlieren sich	resolve; subside
651-652	juckendes makulöses Exanthem	itching macular rash
652-653	Fortführen der Therapie	continuation of treatment
656	hingewiesen werden	to be informed
656-657	sich ... einstellen	to adjust
659	logVL	VL (log ₁₀); HIV RNA level (log ₁₀) <u>Note:</u> The logarithms used in these assessments are to base ten. In the English-language literature (and in many German publications), this is usually specified by the subscript 10.
661	vor Therapie	baseline
662	Therapieansprechen unter HAART anhand	response to HAART defined by
663	ausreichende Viruslastsuppression	acceptable virological response
663-664	unzureichende Viruslastsuppression	less than minimally acceptable virological response
665	vom Nadir reproduziert	after achieving a (virological) nadir reproduced
666	1,5 log Reduktion	1.5 log ₁₀ decrease ([o:] fall)

670	Dosierung pro Tag	daily dosage
	Plasmaspiegel	plasma levels
	Hauptnebenwirkungen	major toxicities
	Einnahme	administration
672	Azidothymidin (AZT)	azidothymidine (AZT)
	2-mal	twice daily; b.i.d.; bid; BID
		<u>Notes:</u> (1) The German text uses '2-mal', 1-mal', 3-mal'. While '2-mal' tends to be 'twice daily' in context-related English texts (although 'every twelve hours' is also found), '3-mal täglich' can be ambiguous – is that 3 times during the patient's waking hours, or at 8-hourly intervals? In one set of US guidelines, the point is made emphatically that indinavir has to be given "q8h not tid". The <i>BNF</i> has '3 times daily' for nelfinavir (where 8-hourly dosing is not a requirement), but 'every 8 hours' for indinavir, where these intervals are crucial.
		(2) The US Guidelines [Ref 38] consistently write 'twice daily' (etc.) and 'every eight hours' (etc.). Abbreviations such as 'b.i.d.' and 'q8h' are not used.
		(3) Writing 'BID' or 'b.i.d.' avoids the ambiguity inherent in a phrase like "in combination with a beta-blocker bid".
	180 mg/m ²	180 mg/m ² ; 180 mg per m ² of body surface
	• KO; KOF Körperoberfläche	BSA body surface area
	p.o. [= per os]	by mouth; oral(ly)
	Hämatotoxizität	blood disorders; haematological toxicity
	Neutropenie	neutropenia
	Anämie	anaemia
672-673	Zidovudin (ZDV)	zidovudine (ZDV)
	unabhängig vom Essen	(may be administered) with or without food; can be taken with or without food; regardless of food
673	Kapseln	capsules
	Suspension [Retrovir]	solution; syrup
	<u>Note:</u> Rote Liste: Lösung	<u>Note:</u> For Retrovir, the <i>Rote Liste</i> gives a 'Lösung', which does not contain sucrose; the US <i>PDR</i> gives a syrup, which contains liquid sucrose; the <i>BNF</i> gives a sugar-free syrup.
	Transmissionsprophylaxe	prevention ([o:] interruption] of (vertical) maternal-infant transmission
	• Reduktion der vertikalen Transmission	reduction of vertical transmission
	Myopathie	myopathy
	Myositis	myositis
	Hepatotoxizität	liver toxicity; hepatic toxicity
674	Tabletten	tablets
	Ampullen [Retrovir]	injection
	<u>Note:</u> The <i>Rote Liste</i> gives an 'i.v. Infusionslösungskonzentrat' in 'Durchstichflaschen'.	<u>Note:</u> The <i>BNF</i> lists an 'injection; for dilution and use as an intravenous infusion', supplied in 'vials'.
	4-mal	every six hours
		<u>Notes:</u> (1) See Note L 672 above.
		(2) The abbreviation QID could be confused with QD, and is not recommended.
	Laktatazidose	lactic acidosis
676	Stavudin (D4T)	stavudine (d4T)
	periphere Neuropathie	peripheral neuropathy
	Pankreatitis	pancreatitis

677	Suspension [Zerit] <u>Note: Rote Liste:</u> Pulver zur Bereitung einer oralen Lösung Leberenzymanstieg	powder for oral solution elevated ([o:] raised; increased) liver enzymes; increase in liver enzymes
677-689	Suspension 30 Tage im Kühlschrank haltbar	after reconstitution with water, store oral solution ([o:] oral solution may be stored) in refrigerator for up to 30 days
680	Zalcitabin (DDC) 3-mal	zalcitabine (ddC; DDC) every eight hours; t.i.d.; tid <u>Note:</u> See Note L 672 above.
680-682	nüchtern (1 h vor oder 2 h nach dem Essen)	on an empty stomach (one hour before or two hours after a meal); on an empty stomach (one hour before or two hours after food) <u>Note:</u> Since (unless the quantities are specified) it may not be clear how much food is “a meal”, the term ‘food’ is preferred e.g. by the <i>BNF</i> .
681	in Vorbereitung orale und ösophageale Ulzera	in development oral ulcers, oesophageal ulcers <u>Note:</u> Since the two do not necessarily co-occur, a comma would make more sense than an ‘and’.
684	Didanosin (DDI) Hyperurikämie	didanosine (ddI; DDI) hyperuricaemia
685	Suspension [Videx] <u>Note: Rote Liste:</u> Pulver retinale Depigmentation	powder for oral solution retinal depigmentation
686	Elektrolystörungen	electrolyte abnormalities; electrolyte disturbances
687	Lamivudin (3TC)	lamivudine (3TC)
688	Suspension [Epivir] <u>Note: Rote Liste:</u> Lösung zum Einnehmen	oral solution
690	Abacavir (ABC)	abacavir (ABC)
691	Suspension [Ziagen] <u>Note: Rote Liste:</u> Lösung zum Einnehmen	oral solution
695	potenziell fatal Efavirenz (EFV) nach KG Somnolenz Verwirrung	potentially fatal; (potentially) life-threatening efavirenz (EFV) guided by body weight somnolence; [also:] drowsiness confusion
696	Suspension [Sustiva] <u>Note: Rote Liste:</u> Lösung zum Einnehmen Konzentrationschwäche Amnesie Agitation	oral solution impaired concentration amnesia agitation
697	Veränderungen der Persönlichkeit • Depersonalisationsgefühl Halluzinationen	change(s) in personality; altered personality. depersonalization; [lay level:] spaced-out feeling hallucinations
698	Euphorie Hautausschlag teratogen bei Primaten	euphoria skin rash teratogenic in primates
699	Nevirapin (NVP) einschleichen über 14 Tage	nevirapine (NVP) introduced at low dose and dose increased gradually over 14 days; increase step-wise to full dose over 14 days; initiated at a lower dose and increased in a step-wise fashion over 14 days; stepwise increase in dosage over 14 days; incremental increases in dose over 14 days
	Stevens-Johnson-Syndrom	Stevens-Johnson syndrome

700	Suspension [Viramune] <u>Note: Rote Liste: Suspension zum Einnehmen</u> Leberenzymerrhöhung	oral suspension elevated ([o:] raised; increased) liver enzymes; increase in liver enzymes
	Hepatitis	hepatitis
702	Delavirdin (DLV)	delavirdine (DLV)
705	Nelfinavir (NFV)	nelfinavir (NFV)
	typisch	very common
	Durchfall	diarrhoea
705	mit dem Essen	with food
705-706	gestörter Lipid- und Kohlenhydratstoffwechsel	disturbances of lipid and carbohydrate metabolism; alterations in glucose and lipid metabolism <u>Note: The BNF and the US Guidelines tend to specify the actual disturbances (e.g. hyperglycaemia, diabetes, raised lipids, increase in blood lipids, raised triglycerides; increased blood glucose and plasma triglycerides)</u>
706	Suspension [Viracept] <u>Note: Rote Liste: Pulver zum Einnehmen</u> C _{max}	oral powder C _{max} [= target peak plasma concentration; target maximum plasma level] <u>Note: context = therapeutic drug monitoring</u>
707	C _{min}	C _{min} ; C _{trough} [= target trough plasma concentration; target trough plasma level] <u>Note: context = therapeutic drug monitoring</u>
708	Ritonavir (RTV) Booster-Medikament • Ritonavir-geboostert	ritonavir (RTV) pharmacological booster; pharmacokinetic enhancer ritonavir-boosted
709	Suspension [Norvir] <u>Note: Rote Liste: Lösung</u> Anorexie Geschmacksstörungen	oral solution anorexia taste disturbances [<i>BNF</i>]; taste alteration; taste perversion; dysgeusia <u>Note: 'dysgeusia' is found in the literature. However, more easily spelt and pronounced terms are available.</u>
710-711	periorale Parästhesien	circumoral paraesthesia
711	Blutungen bei Hämophilie	increased bleeding in haemophiliacs; [US Guidelines] spontaneous bleeding episodes in haemophiliacs
713	Amprenavir (APV) Saft [Agenerase] <u>Note: Rote Liste: Lösung zum Einnehmen</u>	amprenavir (APV) solution
714	Suspension [Agenerase] <u>Note: Rote Liste: Lösung zum Einnehmen</u> Blutungen bei Hämophilien	oral solution increased bleeding in haemophiliacs; [US Guidelines] spontaneous bleeding episodes in haemophiliacs
716	Indinavir (IDV) Hyperbilirubinämie	indinavir (IDV) hyperbilirubinaemia
	Nephrolithiasis	nephrolithiasis
717	Blutungskomplikationen bei Hämophilie	increased bleeding in haemophiliacs; [US Guidelines] spontaneous bleeding episodes in haemophiliacs
717-718	mit leichter fettfreier Mahlzeit • [Rote Liste 2003] mit leichter, fett- u. proteinarmer Mahlzeit	with a low-fat, light meal [<i>BNF</i> 38 Sept. 1999 & 46 Sept. 2003]

718	Hämolyse	haemolysis
719	Thrombozytopenie	thrombocytopenia
720-723	ausreichende Flüssigkeitszufuhr	adequate hydration required
724	Grapefruitsaft	grapefruit juice <u>Note:</u> See separate note at end of glossary concerning the “nicht mit Grapefruitsaft” instruction.
727	Saquinavir (SQV) Hartgelkapseln • Hartkapseln <u>Notes:</u> (1) In the list given, the distinction between Invirase = hard-gel formulation, and Fortovase = soft-gel formulation, is not clearly made. (2) The US Guidelines show the proprietary names with a TM sign; the BNF and the <i>Rote Liste</i> show the names with an ® sign.	saquinavir (SQV) hard gelatin capsules; hard gel capsules; [where distinction from a soft gel formulation is not required:] capsules
	begrenzte Erfahrung	limited experience
	2 h nach MZ [= Mahlzeit] • [<i>Rote Liste</i> 2003] zu od. innerhalb v. 2 Std. nach der Mahlz.	within two hours of a full meal
727-728	Weichgelkapseln • Weichkapseln <u>Note:</u> In the list given, the distinction between Invirase = hard-gel, and Fortovase = soft-gel formulation is not clearly made.	soft gelatin capsules; soft gel capsules
728	Photosensitivität	photosensitivity
	Resorption	absorption <u>Note:</u> In English, ‘resorption’ applies to the breakdown and recycling of substances originally produced within the body (e.g. bone; rat fetuses); ‘absorption’ applies to substances that are introduced into the body (e.g. food, drugs).
730	Lopinavir/Ritonavir (LPV/RTV)	lopinavir/ritonavir (LPV/RTV)
	Hautausschlag	rash
731	Suspension [Kaletra] <u>Note:</u> <i>Rote Liste</i> : Lösung zum Einnehmen	oral solution
733	Höchstdosierung	maximum daily dose
734	Kopfschmerzen	headache
	Müdigkeit	fatigue; asthenia
	gastrointestinale Beschwerden	gastrointestinal disturbances; gastrointestinal complaints; gastrointestinal side effects
	• Beschwerden im Bauchraum	abdominal discomfort
	Übelkeit	nausea
735	steht im Rahmen eines Expanded-access-Programms zur Verfügung	is available through an expanded-access programme
736	Packungsbeilage	patient information leaflet PIL; package insert; package leaflet
738-739	ausgeprägtes Hautexanthem	moderately severe skin rash
739-740	Abbruch der Therapie	discontinuation of treatment
742-743	2-wöchige “Einschleichphase” • [<i>Rote Liste</i>] Einleitungsphase	slow dose escalation over two weeks, from ... to; dose is slowly increased over two weeks, from ... to
743	einmal pro Tag	once daily; OD; QD
744	zweimal pro Tag	twice daily; b.i.d., bid; BID <u>Note:</u> See Notes at L 672 above.
750	Durchfälle	diarrhoea
754-755	in Flüssigkeit gelöst	dissolved in liquid
754	verkapselt	put into capsules

754-755	Leerkapsel	empty gelatin capsule
755	o <u>Note:</u> This is a capsule size (21.30 mm long when assembled; filling volume 0.68 mL), and should be written 0.	0
757-761	als unerwünschte Nebenwirkungen stehen ... im Vordergrund	the main adverse effects are; the most common toxicities are
758-759	gastrointestinale Störungen	gastrointestinal disturbances; gastrointestinal complaints
759-760	initial auftretende Bauchschmerzen	abdominal pain early after the start of treatment
761	Erbrechen	vomiting
768	Abbau	breakdown
774	Diarrhö	diarrhoea
780-781	in begrenztem Umfang Daten mit Jugendlichen	limited data in adolescents
784-786	unter Steuerung mittels Plasmaspiegelkontrollen	dose adjustment ([o:] modification) guided by TDM; controlled with therapeutic drug monitoring
789	schlechte Bioverfügbarkeit	poor bioavailability
792	Folgetherapie	salvage regimens
794	Koformulierung	co-formulation
798-800	naïve Kinder	antiretroviral-naïve paediatric patients; ART-naïve paediatric patients
799-800	zum Teil intensiv vorbehandelte Kinder	antiretroviral-experienced paediatric patients, some of whom had previously received intensive ART ([o:] had been aggressively managed with ART; had been heavily pretreated; were highly ART-experienced)
807	Verläufe	scenarios
809-810	vollständiges Therapieansprechen	complete virological response
810	sprechen wir	is defined as
811-812	gesenkt wird und dort verbleibt	durably suppressed; when suppression below the limit of detection is obtained and sustained ([o:] maintained); when sustained control of plasma viraemia ([o:] of viral replication) has been obtained; when sustained undetectability has been achieved
817-818	Verlaufstyp	scenario; pattern
819-820	Therapieversagen hinsichtlich der Viruslastsuppression	virological failure
822	um <1,5 Log-Stufen reduziert	is decreased less than 1.5 log ₁₀ ; a less than 1.5 log ₁₀ decrease
828	Initialwert	baseline viral load
829	set point	set point
	wird überschritten	is exceeded
834-835	Progression innerhalb der CDC-Kategorien	change in CDC immunological classification <u>Note:</u> CDC= Centers for Disease Control and Prevention [beware of different expansions of the abbreviation]
835-836	stark abfallende CD ₄ -Zellen >30% des Absolutwerts in <6 Monaten	substantial decrease in absolute CD ₄ ⁺ T cell count (i.e., >30% decline in <6 months) [Ref 38]
837-838	bei Kindern mit CD ₄ <15% ein Abfall der CD ₄ -Prozentzahl von >5%	for children with CD ₄ ⁺ T cell percentages of <15%, a persistent decline of 5 percentiles or more in CD ₄ ⁺ T cell percentage (i.e., from 15% to 10%) [Ref 38]
839	Toxizität	toxicity
840-841	Progression innerhalb der CDC-Kategorien	disease progression defined as advancement from one paediatric clinical category to another [Ref 38]
842	auffällige Häufung banale Infekte	markedly more frequent coughs and colds; minor respiratory tract infections

843	ohne Änderung des Stadiums	without advancing from clinical category A to clinical category B
843-844	beginnende Enzephalopathie	incipient encephalopathy; CNS disease progression <u>Note</u> : [Ref 38] has ‘progressive neurodevelopmental deterioration’.
845	Gedeihstörung	growth failure; decline in weight-growth velocity <u>Note</u> : ‘failure to thrive’ does not occur in [Ref 38]; it is possible that the term is confined to infants and young children.
850	CD ₄ -Zellzahlen	CD4 ⁺ T cell count
850	CD ₄ -Zellrekonstitution	reconstitution of CD4 cells; immune reconstitution; immune repopulation
854	altes Regimen	previous regimen; failing regimen
	neues Regime	new regimen
861	multiple Vortherapie	extensive prior antiretroviral exposure; extensive prior antiretroviral drug exposure; extensive prior ART exposure; multiple prior drugs exposure
862	Resistenzanalyse	resistance assay; resistance testing; resistance test
863	A+B bzw. X+Y	NRTI ₁ +NRTI ₂ and NRTI ₃ +NRTI ₄
865	RTV niedrig dosiert stehen für NRTI	low-dose RTV are NRTIs
871-872	verminderte Virulenz	impaired virulence; reduced virulence; loss of virulence
872	“Fitness”	viral fitness; replicative fitness of the virus
876	eindeutige Definition	clear-cut definition
879	zusammenfassend	in summary
881	Befunde	findings; parameters; considerations
889-890	denkbare Behandlungsalternativen	options
892	antiretrovirale Vortherapie	prior antiretroviral exposure; prior ART exposure; prior use of antiretroviral drugs; previous antiretroviral use
893	intensiver	more aggressive
895-896	randomisierte, prospektive Studien	randomized prospective trials
897	nach Resistenztests gesteuert	guided by resistance testing
900	Wert	utility; role
900-901	genotypische oder phänotypische Resistenztests	genotypic or phenotypic resistance testing ([o:] analysis); genotypic or phenotypic resistance assays; genotyping or phenotyping; genotype or phenotype testing
901-902	zur Optimierung der Therapie	to optimize management
902-903	noch nicht wissenschaftlich etabliert	has yet to be fully established in randomized controlled trials; has yet to be shown to be beneficial in controlled clinical trials; there is still a lack of definitive studies to evaluate the clinical benefits; definitive clinical trial data are not currently available
909	Institut	Department
910-911	Referenzzentrum	reference centre
911	Retroviren	retroviruses
913-914	empfindliche Medikamente	drugs to which the virus is sensitive; drugs active against the virus
915-916	Medikamentenanamnese	prior antiretroviral exposure; prior ART exposure; prior use of antiretroviral drugs

917	Mega-HAART-Therapie	mega-HAART <u>Notes:</u> (1) Since the T stands for ‘therapy’, there is no need to translate ‘Therapie’. Mega-HAART is also known as ‘multiple-drug rescue therapy’.
925	Therapiesequenzen	sequential regimens
926-927	stellen lediglich eine Orientierung dar	are for general guidance only; provide only general guidance
931	Altersklassen	age groups; age categories
936	wenig sinnvoll	not recommended
938-939	aus verschiedenen Überlegungen heraus	for a variety of reasons
939-940	Kumulation von Nebenwirkungen	cumulative adverse effects; additive toxicity
941-942	kontraindiziert	contraindicated
948-949	Arzneimittelsicherheit	safety
951	Arzneimittelinteraktionen	drug interactions; drug-drug interactions
954-955	unter Beibehaltung der Sicherheit	without putting the patient at risk
957-958	medikamentöse Behandlung	drug treatment
958	Begleitinfektionen	coexistent infections; concurrent infections
959	Tuberkulose	tuberculosis TB
	• Tbc; TB	
	CMV-Infektion	CMV infection
	CMV = Cytomegalievirus; Zytomegalievirus	CMV = cytomegalovirus
973-974	Rücksprache nehmen	to consult
979	Hepatitis B	hepatitis B
981-982	antiretrovirale Aktivität gegenüber Hepatitis-B-Virus	anti-HBV activity
985-986	bei gegebener Indikation zur HAART	in patients requiring HAART
986-987	ein Regime unter Einschluss von 3TC zu wählen	to include 3TC in the regimen
980	Kofaktor	cofactor
981-982	Erhöhungen der Transaminasen	raised transaminases; hepatic transaminase elevation
993-995	Patienten mit ... und ... Infektionen	patients co-infected with ... and ...
994	Hepatitis C	hepatitis C
Un-numbered	HIV-Ambulanz	HIV clinic
	Universitätskinderklinik Klinikum Mannheim	Department of Paediatrics of Mannheim University Hospital
	Immundefektambulanz	immunodeficiency clinic
	Danksagung	acknowledgements; acknowledgments <u>Note:</u> Both spellings are in <i>The New Oxford Dictionary of English</i> .
	Literatur	References
•	Resistenzmutationen	resistance mutations
•	Leihantikörper	passively acquired maternal antibodies
•	Emtricitabin (FTC) = Emtriva	emtricitabine (FTC) = Emtriva
•	Atazanavir (ATV) = Reyataz	atazanavir (ATV) = Reyataz
•	Fusionsinhibitoren	fusion inhibitors
•	Enfuvritid	enfuvirtide
•	Nukleotid-analoge Reverse-Transkriptase-Hemmer NtRTI; Nukleotid-Analoga – [sing] Nukleotid-Analagon	nucleotide reverse transcriptase inhibitors NtRTIs; nucleotide analogues
•	Tenofovir = Viread®	tenofovir = Viread®

BNF = British National Formulary
PDR = Physicians' Desk Reference

General Notes

Compliance/adherence/concordance

As indicated in the glossary, the (very recent) US Guidelines do not use either ‘concordance’ or ‘concordant’. Both ‘compliance’ and ‘adherence’ are used, with the latter term predominating.

‘Compliance’/‘compliant’ were the initial terms used to describe the consistency and accuracy with which a patient follows the treatment prescribed by a doctor. The noun may be qualified by ‘good’, ‘poor’, ‘consistent’, ‘inconsistent’, etc. ‘Non-compliance’/‘non-compliant’ mean a (partial or total) departure from the prescribed regimen of medicine-taking.

The term came to be seen as (politically) incorrect, since it implies the patient doing as (s)he is told. As a result, it was replaced by the more neutral term ‘adherence’ (and the adjective ‘adherent’), which may be qualified as described above, and can form the negated terms ‘non-adherence’/‘non-adherent’.

However, as *From Compliance to Concordance: Achieving Shared Goals in Medicine* (Royal Pharmaceutical Society of Great Britain [corporate author and publisher], London 1977) shows, both ‘compliance’ and ‘adherence’ were felt to “carry the same semantic overtones” (of the patient being expected to do as told), and were therefore felt to be “equally unhelpful”. “The attempt by social scientists to label the phenomenon [of the patient failing to take his or her medicines as prescribed] ‘non-adherence’ rather than ‘non-compliance’, we [= the Working Party] came to see as a brave but inadequate attempt to find a simple semantic solution to a deep conceptual flaw in many of the previous approaches.” [op. cit. p 11]

The suggestion was to use the term ‘concordance’, to indicate that the goal was to establish a “‘contract’ between patient and prescriber” [op. cit. p 18], a “therapeutic alliance” [op. cit. p 8], or a “concordat with the patient” [op. cit. p 13], in which the patient’s wishes, views, and beliefs are taken into account as much as are the views of the prescribing physician.

As a piece of social-engineering-through-tinkering-with-the-language, this would appear to be yet another “brave attempt”. However, there are problems. Firstly, there may be complete concordance at and beyond the prescribing stage, and yet the patient may not follow the agreed course of treatment, for such reasons as forgetfulness or inability to pay for his or her medicines. Secondly, while a term ‘non-concordance’ may be formed (described by the RPSGB Working Party as “descriptive, not judgmental” [op. cit. p 13]), it does not relate to what the patient does once the “contract” has been established, but to the “outcome of the encounter between doctor and patient: it is the consultation and not the patient that is non-concordant” [ibid].

This leaves a lexical gap: what should one call the behaviour that follows the establishment of a patient-doctor alliance? If ‘compliance’ is out, then ‘adherence’ should be used to fill the gap. Even advocates of concordance (and patient empowerment, etc.) suggest that “concordance” can “facilitate adherent behaviour” and that “in a truly concordant relationship ... there should be almost no intentional non-adherence to a resultant drug regimen.”

[<http://www.pharmj.com/Editorial/20031101/comment/lett01.html>] – in other words, the process (concordance) should be followed by a behaviour (adherence).

The terminological situation is also well illustrated by an article in *The Pharmaceutical Journal* (2003;271:60-61 - http://www.pharmj.com/pdf/forum/pj_20030712_medicines.pdf) on the DOH-initiated Medicines Partnership programme. The title *HIV: the benefits of concordance* is followed by a subheading *Can concordance deliver benefits beyond compliance?*, and a reference to an inventor of an “adherence tool”.

The bottom line for the medical linguist working into English is that ‘compliance’ is out; ‘concordance’ is unusable in many contexts; and ‘adherence’ is, currently, the best bet to describe the actual medicine-taking behaviour.

(Obviously, none of the above remarks affect the use of ‘compliance’ to describe the “give” of a body tissue – it is still ‘pulmonary compliance’. Also, the terms ‘concordant’ and ‘non-concordant’ may be used, in the context of HIV infection, without any reference to the patient’s medicine-taking behaviour: a couple in which both partners are HIV-infected would be described as being ‘concordant’; one in which one partner is, and the other one is not, HIV-infected, would be described as being ‘discordant’. This is similar to the use of the two adjectives in the context of twins, who may, for instance, be concordant or discordant for such conditions as diabetes.)

In German, ‘Compliance’ is a foreign word, which does not carry the same semantic stigma as in the original language. ‘(Therapie)adhärenz’ is a more recent introduction, obviously patterned on the English term. It could be argued that the established native terms ‘Therapietreue’ and ‘Einnahmeverhalten’ could/should be used instead. The latter term, in particular, could accept a wide range of qualifying adjectives, and is perfectly neutral in itself.

Further Reading

Apart from the RPSGB text referred to above,

Vol 217, number 7270 (2003) of *The Pharmaceutical Journal* [an issue devoted to concordance – which kicks off with the lament that “when the call went out for articles and papers for this themed issue, a number submitted to *The Journal* fell into the compliance category.”]

<http://www.pharmj.com/Editorial/20031011/comment/leading.html#1>

and

<http://www.pjonline.com/ContentsPages/Contents20031011.html>

German usage is well described on

http://www.fmc.ch/015_Zeitschrift/1998/03/3.98-s27ff.-Compliance.pdf

The paper gives “Acht Formen der Non-Compliance”, including the “Zahnputzeffekt” (toothbrush effect; white-coat compliance) in patients who take their prescribed medication only just before the next appointment (the way some people brush their teeth only before seeing their dentist).

INN and brand names of antiretroviral drugs

“Während Spezialitätennamen von Land zu Land variieren können und viele Wirkstoffe sogar in einem Land unter verschiedenen Markennamen vertrieben werden, sind die INN international einheitlich (abgesehen von marginalen Unterschieden in der Endsilbe; zum Beispiel deutsch Halofantrin, englisch Halofantrine, lateinisch Halofantrinum).”

<http://www.pharmazeutische-zeitung.de/pza/2002-45/titel.htm>

The above statement concerning the international non-proprietary names is true also of antiretrovirals. Names ending in ‘-ine’ or ‘-ide’ in English are spelt with ‘-in’ or ‘-id’ endings in German.

The brand names of the antiretroviral drugs mentioned in the German text are remarkably similar in Germany, the UK, and the US. (In the management of a pandemic, this is no doubt a benefit.) However, it would be wrong to conclude that this similarity is universal. Thus, efavirenz is marketed in the three countries mentioned above, plus a few others, as Sustiva; however, in many parts of the world its brand name is Stocrin..

Also, as the example of Retrovir (syrup containing liquid sucrose vs sugar-free syrup) shows, identical brand names may be used for different formulations.

® vs ™

Basically, ® indicates a registered trade mark (although it does not say in which country or countries the registration has been obtained), while ™ indicates a trade mark, which may or may not have been registered.

The situation regarding the antiretrovirals in the present text is confused, to say the least. The German text has all the proprietary names marked ®. The September 2003 US Guidelines contain both symbols (such drugs as Ziagen, Agenerase, and Sustiva are marked ™; Norvir and Epivir are marked ®). The 2003 PDR (based upon information supplied by the drug companies) uses ® in the three above-mentioned cases marked ™. The September 2003 BNF uses ® throughout. The 2003 Rote Liste identifies Ziagen, Agenerase, and Epivir as ™, while the other drugs mentioned above are marked ®.

Since, in the peer-reviewed English-language literature, it is customary to indicate whether a given drug (mentioned by its proprietary name) is ® or ™, this aspect will need to be checked by the translator.

The “no grapefruit juice with indinavir” instruction

According to the senior author, it is not clear where this instruction originally came from; also, since indinavir is rarely used nowadays in the paediatric patient population, the issue is of little concern.

The statement in *Pharmakritik*

<http://www.infomed.org/pharma-kritik/pk07a-96.html>.

dates from 1997:

“*Proteaseinhibitoren*

Grapefruitsaft vermag offenbar auch die Bioverfügbarkeit von *Saquinavir* (Invirase®) zu verdoppeln oder gar zu verdreifachen. Saquinavir ist sonst nur zu etwa 4% systemisch verfügbar. Hier könnte der gezielte Einsatz von Grapefruitsaft grundsätzlich einen besonderen Vorteil bieten. (Die heute für Personen mit fortgeschrittener HIV-Infektion empfohlene Tagesdosis von 1800 mg Saquinavir kostet 710 Franken pro Monat).

Nach Angaben der Herstellerfirma führt dagegen die Verabreichung von Grapefruitsaft mit *Indinavir* (Crixivan®) zu einer leichten Abnahme der AUC.”

The advice not to coadminister grapefruit juice with indinavir is still on a number of Web sites. The extent of the impairment (if any), and the underlying mechanism appear to be somewhat unclear.

Indinavir and grapefruit juice

[Maggie Hook]

1. According to a Canadian pharmacist (Dean Elbe), who has made a special study of grapefruit juice (GJ)-drug interactions [see <www.powernetdesign.com/grapefruit/Interactions/>], the often publicised statement that indinavir should not be taken with GJ appears to emanate from the 1996 package insert published by the manufacturer (Merck & Co.). In Elbe's article of March 16th 2003, he says that the original Merck statement was based on "a study" which showed a 26% decrease in AUC (i.e. a serious decrease in plasma concentrations) when a single dose of indinavir was co-administered with 250 ml of single-strength GJ to healthy volunteers. However, more detailed information from

more recent investigations in 14 HIV-positive subjects (Shelton MJ et al., J Clin Pharmacol, 2001;41(4):435-42) and in 13 healthy volunteers (Penzak SR et al., J Clin Pharmacol, 2002;42(10):1165-70) suggests that the overall effects of GJ on indinavir pharmacokinetics are complex (see below) but of no clinical relevance, which is probably why more recent data sheets/SPCs do not contain such a warning.

This is borne out in the classic review of GJ-drug interactions by Kane and Lipsky (Mayo Clin Proc, 2000;75(9):933-42), which grades the possibility of an interaction between indinavir and GJ as "*?No*". This particular rating in their table is defined as "*indicates expected findings based on available data*". Kane and Lipsky also state "*Almost all protease inhibitors (this includes indinavir) prescribed to treat human immunodeficiency virus infection are substrates for both CYP3A4 and P-gp (see below). However, most have high oral bioavailabilities and hence are unlikely to be much affected by grapefruit juice*".

This does not apply to saquinavir, whose low bioavailability can be increased by GJ by 50-200%. Other drugs whose serum levels are markedly increased by GJ include ciclosporin, carbamazepine, tacrolimus, methadone, some statins and some calcium channel blockers. Incidentally, it has been suggested that a GJ interaction based on inhibition of P-gp could actually be put to some advantage (see the Pharmakritik article and the Kane and Lipsky review), but since P-gp is widely distributed in the body, general P-gp inhibition could have significant adverse effects, e.g. on the CNS and other organs.

What's so special about grapefruit juice?

About 12 years ago, researchers investigating the oral bioavailability of felodipine in a double-blind study happened to use GJ to mask the taste of ethanol in the felodipine preparation. To their surprise, this resulted in a greatly increased oral bioavailability of felodipine. GJ was subsequently found to contain certain substances (precise identity/ies disputed) that interfere with drug absorption, distribution, metabolism and elimination by inhibiting

- a) the intestinal p-glycoprotein (P-gp) pump or drug transporter system, which normally acts as a sort of absorption barrier, transporting orally administered drugs that have entered enterocytes back into the intestinal lumen; and/or
- b) the intestinal presystemic cytochrome P450 (CYP) 3A4 enzyme system in the gut wall, which normally also acts to decrease drug absorption.

Hence GJ can increase drug absorption in two ways – firstly by *increasing* access from the gut lumen to enterocytes, and secondly by *inhibiting* intestinal CYP3A4-mediated metabolism. [Hepatic CYP3A4 is far less affected by GJ (if at all) than its intestinal counterpart, and it is actually the hepatic variety of CYP3A4 that is chiefly responsible for the metabolism of indinavir (Lin et al., Drug Metab Dispos, 1999;27(10):1187).]

Inhibition of P-gp (e.g. by GJ and a variety of drugs including saquinavir, some antibiotics, some anticancer drugs, digoxin, diltiazem) will therefore increase the absorption of drugs that are substrates of P-gp, and conversely induction of P-gp (e.g. by rifampicin, dexamethasone, thyroxine, St. John's Wort, carbamazepine) will reduce it. However, if, as with indinavir, a drug is also a substrate for intestinal CYP 3A4, the situation can get highly complicated and the effects are unpredictable!

This seems to be the case with indinavir and GJ, not least because there is a high degree of interindividual variability in intestinal concentrations of CYP3A4 and in the functioning of P-gp. This variability is due to genetic variations, disease (Siegmund et al., Internist, 2003;44:219-226), environmental factors and food – to say nothing of the relative importance of intestinal versus hepatic CYP3A4. The overall effect seems to be that absorption of indinavir is slightly delayed by GJ (Shelton et al., 2001), and blood levels of indinavir are either slightly decreased or not affected by GJ!

What's so important about drug-drug or drug-GJ interactions?

Interactions that lead to an increase in serum concentrations of one drug (e.g. through inhibition of metabolising enzymes) can be clinically relevant if that drug has a narrow therapeutic index and has serious dose-dependent adverse effects. A reduction in serum concentrations (through induction of metabolising enzymes) can also have extremely grave consequences: in a renal transplant recipient, levels of the immunosuppressant ciclosporin were so reduced by concomitant ingestion of St. John's Wort, which is an inducer of P-gp and CYP 3A4 (Hennessy et al., Brit J Clin Pharmacol, 2002;53:75-?), that the transplanted organ was rejected. Incidentally, St. John's Wort has also been reported to greatly reduce levels of indinavir (Piscitelli et al., Lancet, 2000;355,9203:547-548).]

Dynamics of HIV/AIDS terminology

Given the rate of innovation and change in HIV/AIDS research and patient management, it is not surprising that the relevant terminology is continuously changing or being added to. The situation is well illustrated by two consecutive issues of the US Guidelines (June 2003 and September 2003), which differ in a number of respects (policy issues, newly discovered adverse effects of established drugs, new drugs such as atazanavir and emtricitabine).

<http://aidsinfo.nih.gov/guidelines/archive.asp#51>

provides a "time-line" of the US Guidelines back to 1999.

For German, two useful Web sites, with large amounts of recent terminology + many links are <http://www.hivinfo.de/handbuch/LeitfPaed3c.htm>.
and
<http://hiv.net/2010/buch.htm>

Karin Band

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Many thanks to the senior author of the German text, Dr. T. Niehues, for information on a number of terminological points; to Maggie Hook, for the very detailed item on "indinavir and grapefruit juice", material on concordance, and reviewing the draft glossary; and to Bob Hinchliffe, for a print-out of the September 2003 US Guidelines.

[After reading some of Bob's very helpful answers to questions on the egroup, I asked him to write a piece for the newsletter on the subject of efficient computing for translators – here's the result. Ed.]

Efficient computing by Bob Hinchliffe

When it comes to computer use I tend to adopt the "Japanese worker" mentality, always looking for the most efficient ways of doing things, taking less time to do the same work, performing a procedure in two key-strokes rather than three. Even though I derive great satisfaction from, for instance, discovering a more elegant way of converting hard copy into editable electronic text, I realise that not everyone is interested in the "mechanics" of PCs and that most translators in particular just want to be able to concentrate on the most satisfying part of the job, i.e. the craft of turning a foreign text into the closest possible English equivalent. In other words, we don't really want to be distracted by the PC's workings. What follows will be blindingly obvious to many, but I hope that there are still a few of you in the network who would benefit from these general tips on effective translating with PCs.

Stable operating system

Since a computer crash or keyboard lock-up is the single most irritating side effect of using a PC, a stable operating system is probably the most important factor contributing towards a stress-free working environment. After experiencing various flavours of Windows over the years - 3.1, 95, 98, 98 second edition, Millennium - I have finally encountered a version that doesn't crash every other day: Windows 2000. For those of you lucky enough to avoid such frequent crashes I should point out that I usually work with half a dozen or so applications open at any one time. Most crashes and lock-ups occur as a result of a conflict between two open applications. With older versions of Windows - excluding the Windows NT series which is the precursor to Windows 2000 - a lock-up of one application tends to cause the whole system to lock up in sympathy, necessitating a reset with the "three finger salute" (Ctrl-Alt-Del) or, in extreme cases, a complete reboot with the reset button. But when the more modern operating systems such as Windows 2000 or XP encounter a combination of running programs that they don't like, in my case usually between an Internet browser and some fairly old 16-bit software (e.g. the Oxford-Duden German-English dictionary), only the program causing the conflict stops working. Typing Ctrl-Alt-Del calls up a task manager that can then be used to close down this offending program, allowing the user to continue working as normal with the remaining programs and remembering to avoid the conflicting combination in future. While I accept that it can be very annoying having to pay large sums of money to Microsoft simply to obtain software that works properly, if you are plagued by crashes an upgrade to a stable operating system, i.e. Windows 2000 or XP, may help keep the blood pressure down.

Stable communications

Another potential annoyance associated with earning our living from using computers is the degree of our reliance on Internet Service Providers, or ISPs. I'm still surprised at the number of people who rely on a free Internet account for their business communications. I may be wrong but, since such accounts are likely to attract large volumes of users and since the ISPs concerned are unlikely to invest large sums in server hardware, is it not reasonable to conclude that such ISPs would, on the whole, provide a less reliable service? Moreover, since Internet accounts are relatively inexpensive as a proportion of turnover and count as a tax-deductible expense, surely it makes sense to have at least one back-up provider. I admit to being fairly paranoid in this area, having three ISP accounts and three means of accessing them: modem plus normal telephone line, ISDN card plus corresponding ISDN line, cable modem with a broadband account. Though this was not a deliberate policy on my part - I simply couldn't be bothered to cancel the ISDN line when the cable modem arrived - as I type these words I am, in fact, having to use the ISDN analog connection for my phone, the BT local phone network having developed a serious, as yet unremedied, fault a couple of days ago.

Truly paperless

The three bookshelves in my office have been full now for several years which means that whenever I do buy a new reference book (most recently the German-English Dictionary of Medical Imaging by Pucher - looks very useful at first glance but contains too many unnecessary basic terms so could have been a lot thinner) something else has to go. The days of spending hundreds of pounds a year on reference books are long gone, to be replaced by days of spending similar amounts on software, in terms of both CD-based software and downloaded programs. As far as reference works on CD are concerned, many can now be copied in their entirety onto hard disk for faster text retrieval. In fact, for programs that do not offer this option I often resort to the Internet-based option (e.g. http://www.oqlf.gouv.qc.ca/ressources/gdt_bdl2.html for the Quebec government's "Grand Dictionnaire Terminologique"). By the way, I would also recommend a recently discovered website of 1300 free medical journals in various languages that can be sorted by title or speciality: www.freemedicaljournals.com.

Many software companies are increasingly offering their applications for download, which is a very attractive option for those with broadband connections since it avoids all the unnecessarily bulky packaging associated with the CD versions, and the corresponding programs can be installed immediately. My most recently downloaded programs were both OCR applications: OmniPage Pro and Abby FineReader, which brings me to my next paperless point.

I find that looking at the monitor all the time is much less tiring and more relaxing than alternating between screen and hard copy and having to refocus each time. I even prefer it to looking at the hard copy all the time while typing, because the on-screen font can be adjusted to the most comfortable size by adjusting the zoom factor. But the above only applies, of course, if you have a large, good quality monitor, the screen colours are adjusted to your liking (I prefer to work with a light blue background rather than white) and all distracting reflections are eliminated.

My clients currently send texts for translation in the following formats in decreasing order of frequency: Word files, Adobe Acrobat files (pdf), Powerpoint files, faxes, Excel files, tif files, and, very rarely, jpg files. If the text in a pdf file can be copied and pasted, I prefer to paste this into a Word document rather than Alt-Tabbing between the two programs. If I don't want to retain the complex formatting of the original I paste into Word using the Paste Special/Unformatted Text option on the Edit menu (in fact I use this option so frequently that I have produced a shortcut

macro for this purpose). However, many of my customer's pdf files simply consist of scanned images from which the text cannot be extracted by cutting and pasting. This is where OCR software comes into its own since it scans the file, without the need for any print-out, and thus produces the electronic text (reproduction with 100% accuracy is not unusual with most pdf files). Although this operation can be achieved with the two aforementioned OCR programs, it should be noted that not all OCR software is capable of scanning pdf files directly.

It's in there somewhere

We translators seem to have a sponge-like ability to absorb all kinds of information - whether significant or trivial - and the longer we translate the greater the volume of information accumulated. Unfortunately, the retrieval of information from the brain is often hampered by memory shortcomings, and even if we do manage to recall something from the distant past the software hasn't yet been invented that enables us to cut-and-paste from brain to PC. It is advantageous, therefore, to have all this accumulated experience close to hand, ideally on our hard disks, and we then need some decent text retrieval software to find the relevant information. I'm sure we all occasionally receive texts that are very similar, whether in terms of subject matter or format, to texts that we have translated in the past. Trying to find such texts using Word's own Find command on the File/Open/Tools dialog box can be a slow, inefficient and cumbersome process. Using proper text retrieval software turns this process into a much more agreeable experience. Such software will first take several minutes to create an index of every word that occurs in all your files (in some cases including pdf, HTML, Excel and Powerpoint files). This process only needs to be performed for updating purposes as often as you think fit. The program will then retrieve the relevant files containing single words or combinations of words. Thanks to this index, the software can search much faster than Word's inadequate offering, finding any text occurring in several thousand files within a second or two. I have used a program called "PC Data Finder" over the past couple of years, although the manufacturer appears to have gone out of business and no longer supports this software. I am currently evaluating one of the more expensive text retrieval programs on offer ("dtsearch" available from www.dtsearch.com). For those interested in such programs, the website <http://www.pcmag.com/article2/0,4149,930807,00.asp> provides a useful review (the "Find" program in this review has now been renamed "X1").

The second kind of searching is of the Internet variety. Since most of us have probably become fairly adept at using Internet search engines such as Google or www.scirus.com, I won't address this topic in this article. If anyone would like to know more, simply enter "effective internet searching" (including the quotation marks) into Google to obtain dozens of relevant articles.

Backup

Despite the occasional horror stories that appear in the press - a recent one concerning a researcher who lost several years' work when her laptop was stolen - some people are still very casual about backing up their data. Personally, I hate having to repeat even half an hour's work because of e.g. a software crash. But in the longer term it makes sense to adopt some kind of logical backup procedure for all that valuable information. In my own case, I back up individual files onto zip disks on a daily basis. Once a week or fortnight I will then do a further folder-based backup to a second hard disk. Once a quarter I back up data onto CD. These are all very quick procedures, taking a few seconds for the zip and hard drive back ups and 5 minutes for the CD backups. It is also a good idea to store some of the back ups "off site" in case your office should go up in flames one day.

Don't forget to back up your e-mail address book and, if applicable, past e-mail messages and attachments. I like to keep a record of incoming and outgoing e-mails over the previous six months or so, and the corresponding back up file currently occupies about 70 MB of my hard disk. Backup software is available for most e-mail programs - I use something called "Outlook Express Backup Wizard" - and some are even offered free of charge. Simply enter the name of your e-mail program followed by the word "backup" in Google and you'll be presented with the relevant information. Even if your computer is not stolen, does not catch fire or break down, the time will surely come when you are obliged to transfer your data to a new PC. A logical backup policy will help keep this procedure as painless as possible.

Ergonomics

Since ergonomic factors have recently been addressed at length in recent ITI bulletin articles by Kay McBurney and Michael Benis I shall confine myself to highlighting what I believe to be the three most important requirements for comfortable computing: a comfortable, adjustable chair that provides adequate lumbar support (I also like adjustable armrests), a large and properly adjusted good-quality monitor and keyboard shortcuts. As regards the latter requirement I think that everyone should at least be able to remember the 20 or so keyboard shortcuts highlighted in Kay McBurney's article in the Jan-Feb 2003 ITI bulletin. Not only do they save time, they also ensure a smoother work flow. For those interested in going the whole hog, the complete set of over 400 Word shortcut commands can be printed out or viewed as follows:

Go to Tools/Macro/Macros to open the Macro dialog box.

Select Word Commands from the "Macros in" menu.

Select ListCommands in the command window.

Click the Run button and click OK for Current Menu and Keyboard Settings in the resulting dialog box.

A short glossary from Karin Band for a subject that keeps cropping up on the egroup:

Epithelial tissues • Les épithéliums • Epithelgewebe

simple; unilaminar [= 1 layer of cells]	simple; unistratifié	einschichtig
simple squamous; pavement	pavimenteux simple ([o:] unistratifié)	einschichtiges Plattenepithel
simple cuboidal	cubique ([o:] cuboïde) simple ([o:] unistratifié)	einschichtiges kubisches ([o:] isoprismatisches; mittelhohes) Epithel
simple columnar	cylindrique ([o:] prismatique) simple ([o:] unistratifié)	einschichtiges Zylinderepithel; einschichtiges hochprismatisches ([o:] hohes) Epithel
pseudostratified [= unilaminar; cells with nuclei at different levels. Not all cells reach the surface, but all adhere to the basal lamina]	pseudostratifié	mehrreihig hoch; mehrstufig hoch; mehrzellig hoch
stratified; multilaminar [= multilaminar, with two or more layers. Upper layers do not adhere to the basal lamina]	stratifié; pluristratifié	mehrschichtig
stratified cuboidal	cubique ([o:] cuboïde) stratifié	mehrschichtiges kubisches ([o:] isoprismatisches) Epithel

stratified columnar	cylindrique ([o:] prismatique) stratifié	mehrschichtiges Zylinderepithel; mehrschichtiges hochprismatisches Epithel
keratinized ([o:] keratinizing) stratified squamous	pavimenteux stratifié kératinisé; malpighien kératinisé	mehrschichtiges verhorntes ([o:] verhornendes) Plattenepithel
non-keratinized ([o:] non- keratinizing) stratified squamous	pavimenteux stratifié non kératinisé; malpighien non kératinisé	mehrschichtiges unverhorntes ([o:] nicht verhornendes) Plattenepithel
urothelium; transitional epithelium; urinary epithelium [= specialized, highly distensible lining of much of the urinary tract. High when relaxed (a), flat when distended (b).	urothélium; épithélium transitionnel; épithélium de transition; épithélium paramalpighien; épithélium polymorphe	Urothel; Übergangsepithel

Further terminology

covering and lining epithelium	épithélium de revêtement	oberflächenbildende Epithelien
glandular epithelium	épithélium glandulaire	Drüsene epithelien
surface specialization	différenciation apicale	polare Differenzierung
microvilli	microvillosités	Mikrovilli
brush border; striated border	bordure en brosse; plateau strié	Bürstensaum
<u>Note:</u> In En, the two terms are used synonymously. In Fr, ‘bordure en brosse’ would be more likely to be used to describe the arrangement seen in the proximal convoluted tubule of the kidney, and ‘plateau strié’ the arrangement seen in the gut.		
cilia	cils (vibratiles)	Flimmerhäarchen; Kinozilien; Zilien; Wimpern
ciliated epithelium	épithélium cilié	Flimmerepithel; [occ] Wimpernepithel
stereocilia	stéréocils	Stereozilien
goblet cells	cellules caliciformes (à mucus)	Becherzellen
glands	glandes	Drüsen
lamina propria (of mucosa)	lamina propria mucosae [new nomenclature]; chorion [old nomenclature] <u>Note:</u> The old-nomenclature is a major pitfall, since En ‘chorion’ does not have this meaning.	Lamina propria (mucosae)

Notes:

(1) For technical reasons, it has not been possible to provide illustrations of the different epithelial patterns.

For illustrations (in many cases, 3D-views) see

Gray’s 37/e;

Principles of Anatomy and Physiology. GJ Tortora & NP Anagnostakos. 6/e Harper Collins Publishers 1990:92–101.

For a French site, see

<http://www.med.univ-tours.fr/enseign/histologie/epithelium/rep03.html>

For a German site, see

http://www.medizin.fu-berlin.de/klinphys/lehre/v_pharmaz_phy_ahg/v_pharmaz_phy_skript02_epithell.pdf

(2) The illustration ‘Types of epithelium’ in the printed version of *Stedman’s* 27/e is incomplete, while the Electronic version is incomplete and contains a terminological mistake (‘pseudostriated’). ‘Epithelium of different types’ in *Dorland’s* 29/e is the better option.

(3) The G term ‘Pflasterepithel’ may mean either a simple cuboidal or a simple squamous epithelium, and is, therefore, best avoided.

(4) Textbook drawings of the urothelium vary – with some showing a pseudostratified pattern, while others (including the one in Gray’s 37/e) show a multilaminar arrangement.

(5) Stratified epithelia are named after the shape of the cells in the uppermost layer.

Book reviews

Dorland's Illustrated Medical Dictionary

Chief Lexicographer, Elsevier: DM Anderson.
30/e Philadelphia, Saunders.
© 2003 Elsevier.*
2190 pp.
ISBN 0-7216-0146-4
Price (Waterstone's): £34.99

Dorland's Electronic Medical Dictionary

30/e Saunders.
© 2003, Elsevier Inc.
ISBN 0-7216-0411-0
Price (Waterstone's): £59.99

I first came across *Dorland's* in my student days; since then, I have used a number of editions of the dictionary, and reviewed the 28/e and the 29/e for the *Newsletter*. This edition is quite, quite different.

Book	Electronic
Content	
<ul style="list-style-type: none"> • “Over 118,000 <u>entries</u> defining more than 122,000 <u>terms</u>” • “Over 1100 <u>illustrations</u> in all” • 52 <u>tables</u>; 56 <u>plates</u>; 18 <u>appendices</u> <p><u>Spelling</u>: American English</p>	<ul style="list-style-type: none"> • “The CD-ROM contains the <u>full content of the book</u>.” • Subwords displayed with main words. They come with their definitions, or, if the ‘expand subwords’ option is unchecked, they form links that can be clicked to obtain the definition. • Tables, plates, and appendices may be called up from separate indexes. • Illustrations associated with headwords appear in thumbnail format, and may be double-clicked to get a larger view, then zoomed in or out.
Features	
<ul style="list-style-type: none"> • <u>Syllabication</u> indicated by dots • <u>Pronunciation</u> indicated by a home-made (non-IPA) system, which caters for the schwa, but cannot distinguish between voiced and voiceless <i>th</i>. Standard: American English; <i>apoptosis</i> given as [ap"op-to'sis]; <i>prion</i> as rhyming with ‘spy on’. • <u>Etymology</u> Word origins given with individual headwords; plus a chapter on Medical Etymology • <u>Terminology from official publications</u> (such as <i>DSM-IV</i>, <i>Terminologia Anatomica</i>) is marked as such. • <u>Eponyms</u> Inconsistent presentation of possessive (-'s) and nonpossessive forms; no reference to the WHO rule outlawing the possessive form. • <u>Thumb index</u> <p>• <u>CD-ROM</u> included in book; for access to Dorland's Electronic Medical Speller, v. 4.0 (“adds hundreds of thousands of medical terms to any computer's spell-checker”) and to put <i>Dorland's Pocket Medical Dictionary</i> (“more than 35,000 words and their definitions”) on a PDA.</p> <p>[Please note: This is not the same as the Electronic Dictionary discussed in this review.]</p>	<ul style="list-style-type: none"> • <u>Syllabication</u> (as in the book) • As in the book; plus <u>audio pronunciations</u> of many main entries • As in the book • As in the book • As in the book • For other features, see separate review of Electronic Dictionary below.

* “The world's premier names in health care publishing - Saunders, Mosby, Churchill Livingstone, Butterworth-Heinemann, and Hanley & Belfus are now all members of the Elsevier, Health Sciences Division a team of leading publishers dedicated to meeting the information needs of health science professionals.”

This edition vs its predecessor

- The scope of entries has been widened: I welcome the addition of *hemiarthroplasty*; *viral load*; *evidence-based medicine*; *quasispecies*; *HAART*; *mad cow disease*; and many others. In particular, the terminology of complementary and alternative medicine has been given greater prominence (“over 600 terms”; “over 800 new terms” – claims vary). Such previously covered terms as *acupuncture* and *moxibustion* now feature revised and expanded definitions; *aromatherapy* is a new entry; as, indeed, is *complementary medicine*.
 - The number of appendices has been increased. A Selection of Surgical Equipment offers a large number of eponyms (albeit no illustrations). Cancer Staging gives TNM, FAB, FIGO, and other systems. Miscellaneous Symbols should be useful when it comes to deciphering patient notes, and offers ideas for note-taking (e.g. in consecutive interpretation).
 - The main, and most obvious, difference between the 30/e and its predecessors is the introduction of colour on a large scale: a brighter front cover, with details of three of the colour plates; headwords in red; long lists of subentries (e.g. following *corpus* or *point*) placed in yellow boxes; tables in blue boxes; the time-honoured anatomy plates sporting at least one additional colour; almost all of the old line drawings now coloured; and, above all, lots and lots of colour photos (illustrating body structures, tests, disorders, instruments, etc.). Obviously, not every term carries an illustration; however, many do.
- The result is a very modern-looking, visually stimulating book, which allows the reader to understand the meaning of terms, and tempts him or her to acquire knowledge.

This edition vs its successor

Good though the 30/e is, it still leaves room for improvement.

Scope Terms not yet in *Dorland's* could/should be added: *nadir*; *mobile wad*; *lag screw*; *compliance/adherence*; *genitourinary medicine*; *bariatric surgery*; *birthing pool*; *fusion inhibitors*; – to mention but a few. Some room could be made by throwing out such dubious and outmoded terms as *Ledbänder* and *plica cordae uteroinguinalis*.¹

Definitions (1) An effort should be made to ensure that terms that occur within definitions are themselves defined somewhere in the dictionary. Currently, *secondary radiation* is only under *Potter-Bucky grid*; *palpi* (in the *Culex* definition) requires a knowledge of Latin to trace it to its singular *palpus*. The (less than scientific) term *unaerated blood* is found only in the definition of *truncus pulmonalis*. (2) The definitions of *tubercle of tibia* and *tibial spine* should be checked, since they clash with current usage and are unhelpful in interpreting such phrases as “anteromedialization of the tibial tubercle” or “the ACL inserts into the anterior tibial spine”. Similarly, the definition of *crural*, which seems to have been changed from the one in the 29/e, should be reconsidered: the adjective is not, normally, defined as applying to the entire lower limb, but to what the anatomists describe as the *leg*. *Stent graft* has acquired a meaning that differs from that of an *inlay graft*.

Proof-reading While the quality of proof-reading is good overall, there are some mistakes: *Brânemark* (for: *Brånemark*); *mommoplasty* (for: *mammoplasty* or *mammoplasty* – p XX); *tenius* (for: *tenuis* – p XXV); and several mistakes in the anatomical Appendices (most of them involving TA nomenclature).

Appendices (1) Quite generally, a thumb index to facilitate the finding of specific appendices would be an advantage. (2) The old-established list of frequently used stems in Appendix 1 is useful, but could do with certain additions (e.g. *rhiz-* = *root*), and with the rewriting of such silly examples as *pupil- pupilla* – *girl* – *pupillomotor*. The newly created list of English terms with corresponding [Greek or Latin] prefixes, suffixes, and combining forms is of doubtful benefit: *drinking* – *-posia*; *ill* – *-cac(o)-*; *treatise* – *-logy*; and similar examples, are unlikely to do much good. Also, *billionth* is wrongly given as *10⁹*; and why only *glans clitoridis* (but not *glans penis*) should be *balan(o)-* remains unclear. (3) Perhaps the time has come to say farewell to the Phobias (Appendix 10): there cannot be many psychiatrists left (if ever there were any) who use *phronemophobia*; *achluphobia*; or *peniaphobia*. (The space saved by dropping some of the material currently in the Appendices could be used for such items as the Clinical Categories for Children < 13 Years with HIV Infection; the AO classification of fractures; the Karnofsky scale; and similar items.) Appendix 2 (Selected Abbreviations Used in Medicine) is longer than the corresponding appendix in the 29/e. However, a substantial part of the new material consists of outdated pharmaceutical abbreviations. Whilst these may help one understand 19th-century prescriptions, it could be argued that, in a dictionary for the 21st century, *DIP* (*distal interphalangeal*) would be more important than *Diluc.* (*diluculo* = *at daybreak*), and that *JVD* (*jugular venous distension*) might be more relevant than *juscul.* (*jusculum* = *soup or broth*). In order to understand the unexpanded

¹ The problem with *plica cordae uteroinguinalis* is a fourfold one. Firstly, there is a spello: it should be *chordae*, not *cordae*. Secondly, the term stems from an outdated anatomical nomenclature (the 1936 JNA) devised in Germany, which was never adopted by the rest of the world, and is no longer in use in Germany either. Thirdly, the term refers, not to the round ligament of the uterus (which is *chorda uteroinguinalis (teres)*, in the JNA), but to the portion of the broad ligament enveloping the round ligament (see illustration of *Ligamentum latum uteri*, p 1040 of *Dorland's*). To date, this fold has not had a separate name in any of the other anatomical nomenclatures. Fourthly, if the term has to be included at all, it should be given in the full version that figures in the JNA: *plica chordae uteroinguinalis (teretis)*.

abbreviations in a board-review (= Specialist Registrar) level text,² I would have needed *LUSB*; *HEENT*; *FNA*; *INR*; and others.

Return to some black-and-white illustrations Given the stunning effect of colour in the 30/e, it may appear odd to ask for the restoration of (some) black-and-white. However, the substitution, for the old line drawings, of histological slides to illustrate the different epithelial tissues may please a histologist (who would not need them, anyway), but is not very meaningful to the layperson. Similarly, there is a lot to be said for line drawings to illustrate skin lesions – showing the pattern in depth, rather than the surface appearance presented by a colour photograph. (Also, with the breaking up of the colour insert of the 29/e into individual illustrations to go with different entries, there is no longer a synoptic view of the different skin lesions. Restoring such a view, with B/W or tinted line drawings, would be useful.)

The Electronic dictionary

Requirements: Windows: Pentium II PC, 200 MHz minimum, running Windows 98, Windows ME, Windows 2000, Windows XP, or newer; 64 MB RAM minimum; 200 MB free hard disc space minimum; 2x or faster CD-ROM drive; 800 x 600 monitor with thousands of colours or better; QuickTime 4.0 or higher installed. Browser requirements: Netscape 4.78 (or higher) OR Internet Explorer 5.5 (or higher); JavaScript enabled; Java optional (Java 2 minimum); cookies enabled.

Macintosh: Macintosh PowerPC (200 MHz or higher recommended); System 9.1 or newer; 64 MB RAM minimum; 200 MB free hard disc space minimum; 2x or faster CD-ROM drive; 800 x 600 monitor with thousands of colours or better; QuickTime 4.0 or higher installed. Browser requirements: Netscape 4.78 (or higher) OR Internet Explorer 5.1 (or higher); JavaScript enabled; Java optional; cookies enabled.

Note: Although the software is accessed through an Internet browser, an Internet connection is not required to run the program. There is not even a need for a modem.

- Searches can be made via

- (1) a scrollable list of all main words and subwords. This list allows Greek characters to be inserted, and can be used to find main words or subwords associated with images or pronunciations.

- (2) an A to Z Vocabulary Access. This mode is cumbersome: for a definition of *SPECT*, one would need to click on *S*, on *sten(o)* -- *STI*, and, finally, on the term itself.

- (3) a small Quick-Look-Up® programme (Windows only), whose icon permanently (unless deselected) sits in the bottom right-hand corner of the screen, and which provides access to *Dorland's* definitions without having to open the full *Dorland's Medical Dictionary* application. This useful feature can also be employed for wild-card (first-letters-of-word) searches.

- (4) advanced searches, using Any (OR), All (AND), or Phrase; selecting the entire dictionary, main words only, subwords only, or definitions only.

- (5) The Table of Contents, which provides access to the tables, figures, plates, and appendices (via the respective lists); the Fundamentals of Medical Etymology; credits; etc.

- Annotation is a very useful feature: it allows notes to be added to (existing) dictionary entries (terms, definitions, documents) – I tried it with *stent*, which now comes up every time, not only with the five subwords provided by *Dorland's*, but also with the *JJ-stent* and its definition put in by myself.

- Bookmark allows frequently needed items to be found more quickly.

General assessment

The requirements concerning the operating system are unduly restrictive, certainly as far as Mac users are concerned. I could not run the software on my – not exactly ancient – OS 9.0. (I did not have a problem with *Stedman's*, whose CD-ROM can be run on Mac OS 7.6.1 or higher.)

The user guide supplied with the CD-ROM is slender; not immediately clear to the less-than-expert software user; and could have done with some serious proof-reading before going into print.

Technical support had to be obtained, because of several questions that could not be answered by the guide. Replies ranged from borderline-illiterate e-mail (“Are current programs are set up ...”), through a telephone conversation during which the girl at the other end had to load the program, because she was not sufficiently familiar with it; to a courteous and detailed reply by someone who had had to contact the software developers to find the answers.

The main problems identified are:

- (1) Some of the tables which, in the book, have left-justified columns with nested items appear as centre-justified columns in the Electronic dictionary, which totally destroys the arrangement. “There is nothing in the program that can be done to change the justification of content.” [Technical Support]. This problem affects tables in the body of the dictionary, not those in the Appendices.

- (2) Search on Definitions. This is always a bit of a lottery, since, in order to get to the definition and the term it defines, one would need to know which terms are used in the definition. I tried to search with phrases taken from actual definitions in *Dorland's*, and came across two problems:

² TP Archer et al. *Morning Report: Internal Medicine*. McGraw-Hill 2000.

Firstly, if the phrase occurs in a subword of a main word with a large number of subwords, all the subwords have to be loaded, which takes time. (This may sound complicated; and it is.)

Secondly, I could not understand why some of the *Dorland's* phrases would produce a result, while others, which also had been taken from the dictionary, would not. One such phrase was “appearance of a lattice” (used in the book in the definition of *clathrate*). Reply from Technical Support:

“Common words such as ‘of’ and ‘a’ cannot be searched. ... Common words are ignored during the search.”

(That much is clear, and is the same as with Google searches. However, Google will search for such words if they are part of a phrase placed between inverted commas.)

“However, there has been a recently discovered bug in which any phrase search that contains ‘a’ will return no results. If the user executed a phrase search for ‘appearance of lattice’ they would receive the correct hit.”

Such words as *an* and *à* (as in *folie à deux*) appear to be unaffected; however, a search for *three times a day* would be futile.

(3) Proof-reading. This is a huge problem. The spelling mistakes identified in the book have been reproduced on the CD-ROM. They pale into insignificance compared with what has happened to the Appendices.

For some reason, virtually all the Appendices appear to have been retyped.³ Of the 18 Appendices, three – Apps. 3, 5, and 12 – appear to be “clean” (assuming that the figures in the Celsius and Fahrenheit Temperature Equivalents are correct; and overlooking the fact that the loss of the braces in Anatomy: Bones, Listed by Regions of the Body has left a rather sad-looking list). Of the others, some contain minor – but annoying – mistakes, such as *artifact*; *rubber* (for: *ruber*) (App. 1); *flat haustus* for: *fiat haustus* (App. 2); writing a million as *1.000,000* (App. 13); *prints* (for: *pints*) (App. 14); *milliters* (for: *milliliters*) (App. 15). Of the phobias (App. 10), several have been misspelt. The surgical equipment list in App. 16 contains errors such as *chromatic* (for: *chromic* or *chromicized*), and misspellings such as *Strpi-* (for: *Steri-*), found in three separate terms.⁴

What has happened to the remaining Appendices is a disgrace. The Table of Elements (App. 11) contains *flurine*; *technetium*; and *uraniuim*; and refers to *the longest level isotope* (for: *the longest lived isotope*). Cancer Staging (App. 17) contains several instances of confusion between Roman and Arabic numerals, as well as between 0 and O; the Ann Arbor staging system has been corrupted by such mistakes as writing *VISE* for *III_{SE}*. Worst of the lot are the anatomical appendices (App. 1, and Apps. 6–9) and the Reference Intervals for the Interpretation of Laboratory Tests (App. 18). The anatomical appendices contain surreal spellings, especially in the TA nomenclature: *vena vaca*; *carpet rete* (for: *carpal rete*); *a. branchialis*; *truncus branchiocephalicus*; *biceps branchii*; *pars abominalis aortae*; *nn. labials posterius*; *aa. nasals posteriors laterals*; *calvicular*; *pudentdal*; *conjunctiva*; and many, many more. Latin adjectival endings are extremely unpredictable (unless the ubiquitous occurrence of such “Latin” forms as *posteriors*, *laterals*, *intercostals*, etc. is in itself predictable). Because of a mismatch between different columns, we are told that the lateral cutaneous nerve of the thigh innervates the skin on the side and front of the neck; and that the cystic vein receives blood from the gall bladder and the clitoris, and drains into the right branch of the portal vein and the vesical venous plexus.

Appendix 18 gets the title wrong (it should be *Tests*, not *Test*); gets the bibliographical reference wrong (by making the same mistake); manages to spell *postmenopausal* in three different ways (only one of them correct); writes *hematocript*; *apt* (for: *aPTT*); *Ddimer*; *means corpuscular hemoglobin*; *caddeine* (for: *caffeine*), with *Sandimmune* as a proprietary name; *epinephine* and *norepinephine*; and *tecrolimus*. *Cholesterol* has been omitted, and its subentries placed under *Chloride*, *serum* and *plasma*, which makes the desirable range of chloride “< 200 mg/dL”.

Throughout the Appendices, intrusive letters (such as *intraicorporeal*; *lanterior*; *lupper lbridge*; *lor lfourth*) abound.

And underneath all of these disaster areas, it says ‘© 2003 by Elsevier’.

The problem is not only that this lack of editorial control in what used to be a reputable hardcover dictionary is scandalous, but that it undermines one’s confidence in the Appendices. If the dictionary cannot get the spelling of some of the better-known elements right; if it cannot distinguish between *brachio-* and *branchio-* (nor, for that matter, between *pubic* and *public*); if it slips items into the wrong lines or columns – then how much can one trust the information on atomic weights; on anatomical patterns; and (most crucially, perhaps) on laboratory values?

³ The chapter entitled Fundamentals of Medical Etymology appears to have suffered in the same way. This scholarly little treatise involves a number of diacritics over both Greek and Latin letters. On the printed page, everything looks fine. On the screen and on the printout, the picture is visually unpleasant: for some reason, Greek characters with breathing marks appear to have been borrowed from a different font, which makes the characters concerned look fatter and hovering slightly above the line. The brackets that should contain the rough breathing mark and the smooth breathing mark are empty. Transcriptions of eta and omega (which involve a horizontal line above the *e* and the *o*, respectively) are also from a different font, as are the Latin vowels marked with an indicator of vowel length. Also, mistakes have crept in. The author of the chapter did not write *ararachnid*; neither did he suggest that eta be transcribed *Ā*.

⁴ Interestingly, this misspelling cannot be found with a search of the dictionary. Neither can the *anticonuvlsants* that occur in App. 18. It would appear that the software will not search for what it considers to be impossible combinations of letters – even if these combinations occur in the electronic dictionary.

(The problem is alleviated, to some extent, by the fact that the reference values for a substance such as tacrolimus cannot be found anyway: unless one types in the misspelt name, an Advanced Search of the entire dictionary will not come up with the entry in Appendix 18.)

It leaves one wondering why a publishing house that vaunts the power of its Speller to “recognize hundreds and thousands of medical terms” did not run that spell-check over the Appendices. My standard, non-medical Office:mac 2001 spell-checker moans when (in App. 18) it comes across *mahnesium*, *serium*, and I cannot blame it: I am sure it would be happier with *magnesium*, *serum*.

One point worth noting is that the Elsevier Science CD-ROM License Agreement contains a (customary) disclaimer of “any liability to any person for any loss or damage caused by errors or omissions in the proprietary material.” Or, as it says in the *Stedman’s* Program License Agreement: “Because the program is inherently complex and may not be completely free of errors, you are advised to verify your work.”

***Dorland’s* for the medical linguist**

To repeat some of the remarks made in the recent review of *Stedman’s*: The most important point to remember is that, however useful a monolingual defining dictionary like *Dorland’s* may be, this sort of book has an agenda that is, in many respects, different from that of the medical linguist. The main purpose (apart from providing a spell-check) is to enable the (English-speaking) reader to understand a medical term or expression. To this end, all manner of terms are collected – albeit without any indication of where or when the terms were found. The terminology may be recent or 19th century; used by native speakers or employed by foreigners trying to express themselves in what they believe to be correct English.

Dorland’s tells the reader that

“cross-referencing has also been used for earlier terms that have been supplanted ... In such instances, the definition is attached to the term that is currently the preferred term.”

but immediately qualifies this statement by a word of warning:

“In some instances, preference for one term over another may be slight or even nonexistent, while in others, different spellings or terms may be preferred by different authorities, by different specialties, or in different regions; ... the user should remember that the appearance of a cross reference or definition does not always indicate a preference for one form or synonym over another.”

It is true that some of the more outdated terms (such as *crural arch*, or *perone*) do not even appear as synonyms of their more modern equivalents. However, one wonders how relevant they are in this day and age; and how much mischief they could cause if used in a modern text.

It should also be remembered that, just because an English term is defined in a certain way, its foreign-language look-alike will not necessarily have the same definition. It may be defined quite differently (*faux ami*) – e.g. English *fatality* vs French *fatalité* or German *Fatalität*; or it may have additional meanings, of which at least one will be different from the English term’s (*ami volage*) – e.g. French *serum*, which does mean the same as English *serum*, but has the additional meaning of *solution for infusion*.

And, finally, it should be borne in mind that if a language does not have “a word for it”, there will be a lexical gap in the best of dictionaries. *Dorland’s* illustrates the distribution of the trigeminal nerve with a colour photo showing the typical swathes of colour representing the three areas supplied by the main divisions of the nerve. There is no term against the small area over the angle of the jaw, whose nerve supply is independent of trigeminus. In French textbooks, this area is typically described as the *encoche massétérienne*. There appears to be no English equivalent.

The take-home message is that just because a term is in one of the monolingual defining dictionaries, it does not follow that the term is in active use by modern native speakers, neither does it mean that its definition will agree with that of its foreign-language look-alike. In common with other dictionaries of this kind, *Dorland’s* can help by providing a definition of the English term; it is up to the linguist to find the appropriate resources to establish what the foreign-language term is trying to say. And concepts that do not exist in a language will not be represented by a word in a dictionary.

Dorland’s* vs *Stedman’s

It has been said that the situation regarding the two dictionaries is like that regarding Mac vs IBM-clone computers: people will swear by either one or the other. I find that I can live happily with both dictionaries – indeed, I think that medical linguists should get a copy of each. The two dictionaries are, in many respects, complementary. Some items, such as *nadir*, not currently covered by *Dorland’s* are in *Stedman’s*; while the treatment of stents is less detailed in *Stedman’s* than it is in *Dorland’s*. *Stedman’s* has tables that do not exist in *Dorland’s*, but does not show the subdivisions of the mediastinum. And even the notorious Phobia tables complement each other.

***Dorland's 30/e* – the verdict**

- The book continues the tradition of previous editions, with the added benefit of colour and profuse illustrations.

Would I buy the book? Absolutely.

- The spell-checker software provided with the book may well be useful. However, its installation on my Mac would have involved the removal of the Office:mac 2001 English Dictionary and MS Spelling 3 files – something I was not prepared to consider. I cannot comment on the utility of the PDA software, since I do not have a handheld device. (If, as a conference interpreter, I need a “reference on the go”, it would have to be something more advanced than the Pocket version of *Dorland's*.)
- The Electronic version provides little more than the book: there are selected audio pronunciations; otherwise, the opportunities provided by the medium have not been seized. Considering the animations that could have been included, this electronic dictionary still has a way to go. Also, as discussed above, the software is suffering from problems that should have been identified and ironed out at the development stage. Above all, the Appendices should have been subjected to rigorous proof-reading. Currently, many of them are potentially dangerous.

Would I buy the CD-ROM? Not in its present version.

(Karin R. M. Band)

Eats, Shoots & Leaves: The Zero Tolerance Approach to Punctuation

Lynne Truss

Profile Books, 2003

209 pp

ISBN 1-86197-612-7

Price: £9.99

It would be nice to think that it was a subordinate clause (“one of Santa’s little helpers” – not my joke, but too good to remain unlifted) who put a copy of this book onto Santa’s sleigh for me. In actual fact, I bought it myself, and gave it to someone to give to me. (The title was selling out fast, and the other person might have been too late.) And I bought a second copy, to give to a family member. There must have been thousands of people doing the same – hence the phenomenal and totally unexpected success of a little book about punctuation, in the run-up to Christmas 2003.

The title is explained on the back cover – using the polite version of the Panda joke. (Panda walks into café, consumes a snack, fires into the air, and departs. Why? Because, in a poorly punctuated wildlife manual, a panda is described as an animal which eats, shoots and leaves.)⁵

The panda is lovingly depicted on the front cover, trying to paint out the offending comma.

What took the publishers, the critics, and, presumably, the author, by surprise was that punctuation – a subject that had not been taught to schoolchildren for many, many years – should be so sexy as to generate an instant bestseller. In this day and age, reading lists for university students of translation include poorly punctuated texts; remedial punctuation classes would not come amiss on postgraduate courses; and accidents such as writing “peoples’ freedom” for “people’s freedom” appear to happen in the best-regulated (translators’) families. In such pointless times, a text that talks sensibly about the Oxford comma, describes the use of the colon to mark antithesis, and lists the proper uses of ellipsis (which “are quite specific”), is like the first day of rain after a long drought.

Ms Truss does not consider herself a grammarian, and states that her book does not instruct about punctuation. She describes herself as a stickler, as one who cares deeply about punctuation and gets upset by the way in which it is being mishandled. The book is one great rallying cry to encourage others to unleash their Inner Stickler, and militate for better punctuation.

One of the author’s main concerns is the abuse of the apostrophe. Indeed, she has been known to stand outside a Leicester Square cinema and put a cut-out apostrophe on a stick against an apostrophically challenged film title (*Two Weeks Notice*). The rules that govern the use of this punctuation mark are explained clearly and as concisely as the large number of examples of misuse or non-use will permit. CMETI participants may like to know that St. Thomas’ Hospital figures in this section – albeit without any

⁵ There are several not-so-polite versions on the Internet, including one that would not have been appropriate because it does not involve a misplaced comma.

reference to the fact that the old hospital (on the site now occupied by London Bridge station) was known as St. Thomas's Hospital; and that the medical school also used the Saxon genitive.⁶

The flexibility that exists in English punctuation is well illustrated by the rules in *E,S&L* concerning the use of the apostrophe to indicate plurals of words: the recommended "*do's and don't's*" runs counter to the "*dos and don'ts*" in Bill Bryson's *Troublesome Words* (a title listed in the admirably comprehensive bibliography of *E,S&L*). (I think that Bryson's *dos* and Truss's *don't's* look equally awful; however, that is my problem.)

Another major chapter is devoted to the comma. This chapter should be compulsory reading for everyone coming up through the education system, and for budding translators in particular.

The other punctuation marks (full stop, exclamation mark, question mark, semicolon, colon, dash, hyphen, brackets, ellipsis) are discussed in somewhat shorter sections.

Throughout, the reader is treated to a lot of punctuation history, which is absolutely fascinating.

The general tone is humorous. Some of the examples of misuse are funny in themselves; some are made even funnier by the author's wry comments:

"Cyclist's only (his only what?)"

and

"Dicks in tray (try not to think about it)"

are among my favourite examples.

There are, however, some problems.

The first one that comes to mind is the absence of a subject index. Even if the purpose of the book is not to instruct, it would be useful to know where to go for information on the various stops discussed by the author. *That'll Do, Comma* is clear enough; *Airs and Graces* is less obvious as the source of colon and semicolon rules. This could easily be rectified in the next edition.

Some of the "humour" is a bit strained. References to "clever, dandruffy people" (p 75) are offensive; "Knightsbridge clinics offering semicolon irrigation" is more than a little contrived; while the regret that "[I] am now absolutely kicking myself that I never volunteered to have [Aldus Manutius'] babies" (p 77) is OTT. Still, a writer who manages to produce a book with a shelving category of Reference / Humour may be forgiven the odd lapse into the not-so-humorous.

There are (some) missing commas. Some of these are a matter of taste; some are a matter of consistency; however, one or two are neither. One feels some sympathy for the sub-editor mentioned on p 31, who used to "archly insert dozens of little commas" in Ms Truss's reviews. (The non-commas were promptly statted by the author. *On s'amuse comme on peut.*)

Ms Truss appears to dislike the Internet and all its spelling conventions. Yet, on her own admission, standard (non-Internet) marks will not allow us to notate all types of verbal expression. With the best standard punctuation in the world, the distinction between a serious and an ironic "Nice weather!" cannot be made, or can be made through context only. The invention of the emoticon (AKA the smiley), which, in this particular case, allows the writer to use a tongue-in-cheek sign,

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should be seen as an enrichment of punctuation, rather than as the death knell of the system as we know it. Also, if it is all right to indicate emphasis by underlining, there is no reason why placing a word between two asterisks should not be used for the same purpose. After all, there must have been a time when our present commas, semicolons, and exclamation marks were seen as a newfangled nonsense.

⁶ I am bemused to see how little this grammatical term is known in the English-speaking countries. Learners of English as a foreign language appear to be more familiar with it. What the term signifies is that the singular possessive case formed by adding an apostrophe and an "s" is a remnant of the old Anglo-Saxon inflections, and thus the equivalent of the (unapostrophied) genitive ending in "s" in such languages as German (*Vaters Haus*; *Petersdom*). Interestingly, in Saxony and elsewhere in the German-speaking countries, sticklers are now fighting against a rising tide of inappropriate apostrophes to mark the genitive. Forms such as *Paul's Bar* are being blamed on the example set by McDonald's. Plurals of loanwords such as *Club* formed by the addition of an apostrophe and an "s" are another bugbear.

The book has been criticized on the Internet for being too short. That is not its fault. The point that this is not a comprehensive treatise is made from the start. What it has done is something that the comprehensive treatises have, obviously, failed to do: it has motivated people to take an interest in the previously moribund subject of punctuation. And this single-handed reversal of the *Zeitgeist* is an awe-inspiring achievement.

Verdict: If you are not among the thousands who already own *E,S&L*, go and get a copy now. And read it. And enjoy it. And follow it.

Special Note for Translators

- As pointed out in the review, there are more comprehensive books on punctuation. Several are listed in the Bibliography of *E,S&L*. A trip to a good bookshop should help in choosing which one to buy.
- *E,S&L* contains only one or two brief references to the different conventions in Britain and in the US. Anyone interested in the American system would need a more specific reference. I have found *Punctuation, Capitalization, and Spelling* (E Ehrlich. Schaum's Outline Series, 2/e McGraw-Hill, 1987) a very useful text.
- The point to bear in mind is that the punctuation system to be used in a given translation may not be left to the translator's choice. Chapters in books will have to comply with the editor's style sheet; and papers to be submitted to journals will need to follow the instructions for authors as well as the general house style. (Ms Truss's statement concerning dashes and spaces notwithstanding, American journals in general, and some journals this side of the Atlantic, do not put spaces on either side of a dash.)
- It is not unknown for the reviewers of a manuscript submitted to a journal to criticize the punctuation. Translators must be prepared to defend the punctuation they have used. (I have – successfully – insisted on the retention of a comma closing a non-defining relative clause.) They should also be prepared to concede with good grace if the reviewer feels that the punctuation chosen is too close. (I remember having to sacrifice a whole string of semicolons on one occasion.)
- Translators working out of English into other languages will need to have a thorough knowledge of the rules of punctuation in those languages. The German system is much more syntax-driven; the French one has spaces before just about every mark other than a comma or a full stop; etc.
- Talking of spaces – systems do change over time: in this country, typists used to put two spaces after a full stop. This custom went out with the advent of the word processor – a point well made by *E,S&L* (p 189).

(Karin R. M. Band)
