



2017 TNM Core Group Meeting

4-5th May 2017, Warwick Hotel, Geneva

Present: Dr M Gospodarowicz (MG, Co-Chair); Dr J Brierley (JB, Co-Chair); Dr M Mason (MM, Rapporteur); Dr M Piñeros (MP); Dr B Rous (BR); Dr N Bhatla (NB); Dr C Wittekind (CW); Dr H Asamura (HA); Dr C Compton (CC); Dr L Pollack (LP); Dr R Jakob (RJ); Dr J Wee (JW); Dr S Johnson (SJ); Ms Z Tittenbrun (ZT); Dr L van Eyken (LE); Dr A Lee (AL); Dr B O'Sullivan (BOS); Dr F Bosman (FB).

		ACTION
1. Welcome and opening of the meeting	The meeting opened at 13.30 hrs on 4 th May 2017. Attendees were welcomed to the meeting by MG	
2. Approval of the provisional agenda	The agenda was approved.	
3. Approval of the 2016 meeting minutes	JB/MP	
AGREED	Under section 5.2.3; delete the sentence "essential TNM in lung, stomach, non-Hodgkin's lymphoma and oesophagus are in development"	
AGREED	With the above amendment, the minutes were approved	
4. Report from UICC	SJ (presentation: appendix 1)	
NOTED	Growth in UICC membership with 1,050 recorded at the end of 2016	
	TNM project is back with the Advocacy and Network Team led by Dr Julie Torode. This is largely due to the recognition that recording anatomical stage at diagnosis is critical to understanding cancer burden and to planning cancer services based on surveillance information. SJ and ZT are the main point of contacts for TNM project at UICC:	
	Areas of focus on Convening, Advocacy, Capacity, and the City Cancer Challenge (cities of > 1 million population encouraged to focus on the health of their citizens). Launched at the World Economic Forum in Davos in January 2017	
	Successful activities around World Cancer Day	
	Successful World Cancer Congress 2016, and future Congress in Kuala Lumpur 1-4 th October 2018	

	World Cancer Leaders' Summit in 2016 was attended by 14 Ministers of Health	
	Global Action Plan on NCDs intended to lead to a new Cancer Resolution; due to be launched at World Health Assembly in May. Background and process for resolution noted; financial challenges include Hepatitis B and C vaccination, access to medicines	
AGREED	The website version of the draft resolution will be circulated to all attendees	SJ
NOTED	Key milestones for 2016-2020; numbers of grants, the Pfizer SPARC project.	
AGREED	All to consider institutions that might be prepared to mentor or host grant recipients	ALL
5. Report on 2016-2017 Activities		
5.1 Global Advisory Group reports	AL	
NOTED	TNM National Committees are now established in 21 countries, covering around 60% of the world's population.	
	Need to engage more countries and communities remains.	
	<p>Reports received from National Committees (Appendix 2):</p> <p><i>Belgium:</i> English and French versions available <i>Canada:</i> transition from Collaborative stage to TNM. Examples of use of population based stage data give. <i>China:</i> additional activity outside the committee; progress towards possible transition from use of Chinese classification to UICC TNM for NPC. <i>Denmark:</i> extensive activity noted; many documents in Danish <i>German Speaking:</i> activity noted <i>Gulf States:</i> successful combined conference and breast cancer conference, publication of documents and training activities noted. <i>Italy:</i> publications and lectures noted. Monitoring activities for the correct application of pTNM. <i>Japan:</i> Japanese translation of 8th edition underway; ongoing communications with societies who have their own staging systems. <i>Poland:</i> Translation of 8th edition due September 2017. Publications and training noted. <i>Singapore:</i> input to NPC classification acknowledged. Need to engage with vendors of electronic medical records noted in relation to transition from 7th to 8th edition. <i>Turkey:</i> 7th edition has been translated, not as yet 8th edition. New members are being invited to the group. <i>UK:</i> Colorectal classification for the 8th edition now accepted and will be used in UK. Desire of committee to be involved in development of 9th edition in a meaningful way. Collection of outcomes by stage is available; proportions of stage I/II vs III/IV disease may be a metric for funding by healthcare commissioners.</p>	
AGREED	Thanks expressed to JB, CC, CW, Geraint Williams, Phil	

		Quirke for their pivotal roles in the resolution of the issues around the colorectal classification.	
NOTED		<p>Report from AJCC was not requested for this meeting as the 8th edition has only just been published.</p> <p>Survey of 8th edition writers showed high levels of satisfaction with the process and with the UICC involvement.</p> <p>Implementation of AJCC 8th edition delayed until January 2018 due to problems with histology coding. UK is delaying 8th edition until January 2018 to ensure quality of data collection in transition.</p> <p>AJCC Precision Medicine Core under CC's leadership published quality indicators for a precision medicine tool, (CA 2016). Website includes all available tools, most of which fall short of the quality standards, but some high quality tools are there.</p>	
5.2 Reports from Partner Organisations			
5.2.1 CDC		LP	
NOTED		<p>Current period is one of transition for CDC. New head of surveillance programme appointed, to whom LP reports.</p> <p>CDC are looking for collaborative projects.</p> <p>Much of 2016 was taken up with 8th Edition; changes had substantial implications for cancer registry software, with 1.6 million cancer cases recorded and a high proportion of these having missing data or fields.</p> <p>Support for international work is now more constrained in the budget. Funding for the cancer registry is also falling and CDC and NCI are actively promoting their roles, with AJCC and registrars also working closely on this.</p> <p>Surveillance data is now available to the public, as a public use dataset via the American College of Surgeons – but it is CDC data re-packaged.</p> <p>CDC will consider including extent of disease aspects in future activities.</p>	
5.2.2 FIGO		NB	
NOTED		<p>Review of which cancer sites need changing is underway. Concerns over overdiagnosis and overtreatment of early cervical cancer have prompted activities of the imaging subcommittee. Imaging was proposed for inclusion in staging but this was not upheld. Further developments in surgical staging of cervical cancer are therefore on hold, with a meeting due in July. Noted that the “choosing widely” programme in Ontario similarly targets over investigation.</p> <p>Opinion is divided over changes to endometrial staging with some wanting to include molecular aspects (though most exemplars employ histological rather than</p>	

		<p>molecular biological techniques).</p> <p>Generation of outcomes data from LMIC has not been very successful over the last year.</p> <p>The FIGO mobile app is being developed as stage/resource-based treatment and management guidance.</p>	
5.2.3 IARC		MP	
	NOTED	<p>Focus of activity over the last 12 months has been essential TNM. Trials have been undertaken in Georgia (US), Quito, Zimbabwe, Malawi and Côte d'Ivoire. Training material has been developed and is being disseminated via GICR. These include webinars created in Uruguay, and other material. Two project proposals have also been received.</p> <p>Other projects include the development of material through AFCRN, and the GICR "train the trainers" initiative – with information on coding and on essential TNM, including instructions, flowcharts, and exercises based on real examples from clinical records.</p> <p>Plans for 2018 include the dissemination and use of training materials. Essential TNM will also, at some point, be developed for other sites</p> <p>Translation of training material from English, to French and Spanish has been completed.</p>	
5.2.4 IACR		LE (apologies from Dr Roberto Zanetti)	
	NOTED	<p>Activities have been centred around optimising the quality and utility of registry data.</p> <p>Future meetings include the 39th International IACR meeting, 17-19th October in Utrecht, which will also encompass evaluation of quality of care, staging and biobanking.</p>	
	AGREED	Consider submitting abstracts on essential TNM and the 8 th Edition will be submitted to this meeting.	LE, JB, MP
5.2.5 IASLC		HA	
	NOTED	<p>HA is now the new Chair of the IASLC. Congratulations were expressed.</p> <p>The current work package is the third staging project (the first two leading to the 7th and 8th editions). The current year is year 1 of this programme; the prognostic factors committee is currently being constituted. Some have expressed interest in combining the molecular and clinical databases, and this is under discussion.</p>	
5.2.6 WHO		RJ	
	NOTED	<p>Revision conference for ICD-11 was held last year with some 40 member states attending. The national scientific committees will be reviewing this as well. Field testing in 14 centres is ongoing and will be reviewed between June and Sept this year. Release date is scheduled for April 2018. A medical scientific advisory committee will be established for questions which arise.</p>	

	<p>Previously agreed that anatomic extent of disease information will be embedded; there will be additional anatomic or histopathologic data behind the dots.</p> <p>Previous discussions had agreed that stage information could be embedded as full TNM classification, or as a simpler scale; these discussions pre-dated the development of essential TNM.</p> <p>A new classification, the International Classification of Functional Disability and Health (ICF), is also under development. Its release date is not yet finalised.</p>	
AGREED	The outputs from previous discussions on incorporation of stage will be updated and submitted before September 2017	JB
5.2.7 ICCR	FB	
NOTED	<p>The history and previous collaborations of ICCR.</p> <p>The mission to develop evidence-based datasets in parallel with the blue books, keeping the terminology consistent with them. The intended reach is global.</p> <p>Problems with the male GU classifications, in relation to differences between the published versions of UICC and AJCC (to be discussed further).</p> <p>Urinary and renal datasets are out for consultation; next will be head and neck (due for publication at the end of 2017). Endocrine are under development. Remaining sites are skin, eye, and various ad-hoc sites (e.g. Liver, cervix and CNS).</p> <p>Ongoing revisions are taking place for lung, thymus and heart.</p>	
6. Education Report	ZT and LE	
NOTED	<p>Written reports as included.</p> <p>e-Modules are being revised following the 8th edition. Of 7 modules, 4 are being updated; 2 of these are already back with eCancer for review, and a further 2 are pending. Two modules (the introduction and cervix) are to be translated into French.</p> <p>eCancer modules were accessed 1452 times. They were completed 1089 times (a 75% completion record). The top 10 countries from where they were accessed were noted.</p>	
6.1 Web-based activities		
6.2. TNM Web statistics:		
6.2.1 <i>Homepage</i>	NOTED	Web statistics similar to 2015-16. Two of the TNM pages are in the top 5 of UICC pages visited; most of these were around the publication date of the 8 th edition.
6.2.2 <i>Helpdesk</i>	NOTED	343 technical questions were received; all were answered within the target, with an average of 22 hours. There were also 109 questions sent directly to the

	<p>German helpdesk.</p> <p>42 non-technical questions were received – mainly concerning the timelines for the 8th edition, others included requests for copyright waivers, and information regarding where to buy the book. Most were from pathologists, some were from other groups. The top 10 countries overlapped with those for the e-Modules.</p> <p>Responses were previously sent to AJCC, but concerns had been expressed about non-anonymised responses, in which the person asking the question is identifiable.</p> <p>We will consider whether it is possible to send anonymised responses to AJCC</p>	
AGREED		ZT
7. TNM 8th Edition: errata and next directions	JB	
NOTED	<p>There are a number of errata in both the UICC and AJCC 8th editions.</p> <p>Corrections to the UICC edition are listed on both the UICC and Wiley websites.</p>	
AGREED	<p>Head and Neck</p> <p>Some inconsistencies have been suggested, which will be re-checked and updated if necessary</p>	JB, BOS
NOTED	<p><u>Skin</u></p> <p>UK dermatopathologists have written to BR highlighting inconsistencies in melanoma. (T1a/b cutoff should be <0.8 mm and not ≤0.8mm). This is a UICC error and will be corrected.</p> <p>In non-melanoma, the error in size cutoff was AJCCs; this will be made consistent with head and neck.</p> <p>Vermillion border of lip was changed by the AJCC from lip and oral cavity to skin, on the basis of common aetiology (sunlight).</p> <p>UICC will not change</p>	BR will inform the UK group
AGREED		
NOTED	<p><u>Thyroid</u></p> <p>Concerns from the German thyroid group:</p> <ol style="list-style-type: none"> 1. Change of T3 from previous definition to T3a and T3b now does not include minimal extrathyroid extension. This is because “minimal” invasion is difficult to determine and of dubious prognostic significance. 2. Similarly, the previous “>2cm/minimal extension” is now simply T2. 	
AGREED	A subdivision will be added to the supplement	CW
NOTED	<p><u>Breast</u></p> <p>A proposal received via Han van Krieken, based on a</p>	

<p>AGREED</p> <p>NOTED</p> <p>AGREED</p>	<p>manuscript, from Fouad et al, on nodal staging.</p> <p>This appears to be based on small numbers that would not justify a change.</p> <p>CW will respond suggesting that we will consider this for the 9th edition, ask him to confirm publication of the manuscript when appropriate, but stating that more data are needed.</p> <p>A proposal regarding inflammatory breast cancer. This has been a frequent comment, but noted that inflammatory breast cancer is a problem because the clinical information is needed to make this diagnosis; the pathology by itself is unable to do so.</p> <p>A comment on this can go into the supplement</p>	<p>CW</p> <p>CW</p>
<p>NOTED</p>	<p><u>Ampulla of Vater:</u> UICC recommended changing the definition of N1/2 from ≥ 2 nodes to ≥ 3 for consistency with the rest of the biliary tract. The AJCC changed from 2 to 3 after the final version was approved, but UICC were unaware. This is being corrected in the list of errata</p>	
<p>NOTED</p> <p>AGREED</p>	<p><u>Areas of deliberate difference between AJCC and UICC</u></p> <ol style="list-style-type: none"> 1. <i>Breast CIS</i>: AJCC kept Tis DCIS, but deleted Tis LCIS because this is over-treated in the US. However, it is still in the blue book, and pathologists thought it difficult to exclude. Tis LCIS is therefore still included. 2. <i>Soft tissue sarcoma</i>: In the previous edition, N1 was moved from stage IV to stage III. The AJCC moved it back to stage IV, but UICC have kept it the same. Apparently this was unilaterally undertaken by a member of the AJCC group. 3. <i>Male GU</i>: A forthright article entitled "UICC drops the ball" has been published, criticising differences in the published UICC and AJCC versions. Some of the items are differences in terminology which has been changed in the errata to be consistent with the WHO blue book others are errata that have been corrected..). Some are not differences (e.g. UICC considers it unnecessary to state that that perivesical nodes are N1). Some are deliberate differences – e.g. Subdivision of T1 seminoma, and the retention of anatomic stage groups only for prostate. <p>_A draft letter of response will be prepared</p> <p>A list of deliberate differences between UICC and AJCC together with the rationale, will be placed on the website</p>	<p>MM</p> <p>ZT, JB</p>
<p>NOTED</p>	<p>Wiley will do a second print at the end of the year. Agreed that we need to indicate this.</p>	

	<p>Translations will also need to be corrected, as appropriate</p> <p>PDF inserts that can be pasted in would be of practical use.</p> <p>AJCC and Springer are not going to re-print their edition with errata corrected.</p> <p>Timing of the 9th edition remains uncertain.</p> <p>A section in the online supplement entitled "issues under consideration" would be very useful.</p>	
8. Other publications:		
8.1 TNM Atlas	<p>NOTED</p> <p>This might be valuable as an online, rather than a paper publication.</p> <p>A new edition of the atlas would take 2 years; it would be desirable to bring the atlas edition number in line with the TNM edition number, i.e. Call the next edition the 7th/8th edition, rather than the 7th edition.</p> <p>AJCC are not planning to issue an atlas, because of the extensive use of diagrams in their 8th edition.</p> <p>PDFs from the 6th edition to be sent to Section Editors for their review and indication of updates needed</p> <p>AGREED</p>	JB
8.2 TNM Supplement	<p>NOTED</p> <p>It has been suggested that this might be an online, rather than a published book. However, a published version is in the current contract.</p> <p>Meeting with Wiley to be held in June.</p> <p>DISCUSSED AND NOTED</p> <p>Merits of access to an online version with access via the print version. Wiley do have an e-version of the Livre de Poche in the current package.</p> <p>AGREED</p> <p>Manuscript for the supplement should be prepared by the end of 2017</p>	
9. Translations and Wiley Report	ZT	
	<p>NOTED</p> <p>Early sales figures for the 8th edition are good; 7,310 copies to date (plus 200 ePubs and 10 ePDFs). This compares well with the total sales for the lifetime of the 7th edition of 25,518.</p> <p>Translations into German and Italian have been published.</p> <p>Agreements have been reached for Chinese, Japanese, Polish, Romanian, Russian translations. Negotiations are underway for French, Portuguese (including Brazil). Possibilities for Greek, Hungarian, Spanish, Turkish, and Ukrainian translations are under review. Discussions on</p>	

	<p>an Arabic translation are being followed up on; it is proving hard to find a publisher, as the market is uncertain (professionals use English and some French).</p> <p>Sales of the Supplement to date are 2,173. Uncertainty as to whether Wiley feel this is a good achievement – but noted that it is a prestigious publication for them.</p> <p>Sales of the atlas, 6th edition, are 1,331 to date.</p> <p>Sales of the MCO, 9th edition are 563. Agreements on the paperback and Chinese translations have been secured. Confusion over costs via Amazon are noted.</p>	
DISCUSSED AND AGREED	<p>The experience with the UK blog suggested that uptake would be low. However, a web repository to hold comments and proposals would be desirable; it would need to be made clear that responses would only occur periodically, such as quarterly or semi-annually. This could be co-located with a TNM Supplement forum. Agreed that this will be explored.</p>	ZT
10. Reports		
10.1 Evaluation Committee	MM	
NOTED	<p>Transfer of responsibility for the literature watch from Kingston to Velindre, Cardiff, UK, was achieved smoothly. Strong support from Velindre or UICC.</p> <p>Literature watch 2015 update yielded 670 articles, triaged to 18, with a further 13 flagged for internal discussions (see below). Literature watch 2016 yielded 283 papers, triaged to 18 with a further 7 flagged. The lower yield may be due to delays in the National Library of Medicine.</p> <p>Plan to look again at the methodology for the search, and to consider a search for prognostic factors again, noting that this was too wide to be manageable when last conducted. Also plan to look at issues around flagged articles, such as T1 bladder cancer.</p> <p>Literature watch outputs will be sent to expert panels, for information, not for comment (though feedback welcome), and null returns to the relevant panels.</p>	MM
10.2 Prognostic Classifications Committee	BOS	
NOTED	<p>The future of the Manual of Clinical Oncology in which the classification of prognostic factors sits is uncertain, and depends on Wiley. However a new edition in 2020 would be desirable and if Wiley agrees to publish Dr O’Sullivan will be invited to be Editor in Chief.</p> <p>Prognostic factor grids could be housed both here and in the Livre de Poche. The categorisation of prognostic factors as essential, additional, and ‘new and promising’ is judged to have worked well.</p> <p>The AJCC precision medicine core (CC) is identifying and evaluating tools which might allow individual risk calculation, using insights from stratifiers at the</p>	

	<p>scientific evidence: achieved via the literature watch, and also via the activities of the helpdesk and FAQs</p> <p>v. Monitoring of new prognostic factors: via the prognostic factors grids and the activities of the prognostic factors committee chaired by BOS</p> <p>vi. Convening of experts – exemplified by the present meeting and others such as the GCCS meeting in London (see 12, below).</p> <p>vii. Expansion of relevance of TNM to other groups – collaboration with SIOP resulted in the presence in the manual on a chapter of staging of paediatric tumours for cancer registries; work continues on this and on Essential TNM.</p> <p>viii. Publications – as documented earlier</p> <p>ix. Workshops – as documented earlier</p> <p>x. Educational activities – exemplified by the updating and expansion of the e-Modules.</p> <p>NOTED Potential for future project proposals which could be made to CDC, and which might be within their remit.</p>	
12. Global Consultation – report and next steps	MG	
<p>NOTED Successful workshop held in London in February 2017. Presentations already circulated to attendees.</p> <p>AGREED Presentations to be circulated to the rest of this group</p> <p>NOTED Summary of the meeting:</p> <ul style="list-style-type: none"> • We will limit ourselves to issues pertaining to the tumour – i.e. Not those related to the environment or to the host. • Summarised the needs of different constituencies who use cancer staging. • Recognised the inconsistencies in application of terminology. • Results of the survey indicated areas of great variation in understanding and agreement. • Linguistic aspects noted – “stage” can be a noun, or a verb <p>Outputs from the meeting:</p> <ul style="list-style-type: none"> • Commentary has been submitted and is under consideration by The Lancet Oncology. • First draft of a consensus paper is being prepared. • A checklist of definitions for journals might be developed. <p>The need for classification of prognostic factors other than anatomic extent of disease is widely agreed, but the means is still unclear. A meeting will be convened to look at how we do this, as discussed below.</p>		ZT
13. Future activities	MG	

<p>NOTED</p>	<p>Alignment of TNM with the purpose of UICC:</p> <ul style="list-style-type: none"> • To lower the global burden of cancer • To achieve equity in cancer care • To keep cancer on the global health and development agenda 	
<p>DISCUSSED</p>	<p>Potential areas of future activity for this group:</p> <ol style="list-style-type: none"> 1. <u>Review of existing classifications and tools:</u> to take stock of existing tools, and to consider new and emerging ones, including artificial intelligence and neural networks. To define the state of the art, from the viewpoint of all constituencies. Position paper discussed above; consider all classifications, including WHO, ICD, ICD-O, ICF (International Classification of Functioning, Disability and Health). Consider methodological issues. Focus on survival as the endpoint, but incorporate others. 2. <u>Development of systematic data collection:</u> in a retrievable format, using standardised, synoptic reporting. Need to embed scenario specificity, consider quality of information, precision of measurement and understanding of measurement, which all influence potential utility. 3. <u>Consider the changing landscape of disease:</u> e.g. In situations where most patients present with T1 tumours, other factors other than stage are important for clinical management 4. <u>Engage the next generation:</u> Identify younger professionals who will be active in this area. 5. <u>Engage constituencies in other countries:</u> foster credible engagement with national committees: <ul style="list-style-type: none"> • Highlight differences between 7th and 8th editions • Send full minutes to National Committees • Send other National Committee reports to National Committees. • Invite more feedback, e.g. is more support needed for education/advocacy; how to further develop expert panels? • Send output of literature watch to National Committee Chairs as well as to expert panels. • Encourage the identification of important papers in their own language. • Twinning of National Committees. • Foster engagement of the whole committee, not just the Chair. • Channel GCCS outputs to committees. • Ask National Committees to suggest changes for next edition. • Survey all National Committee members after 1 year. • Monitor transition from 7th to 8th edition and identify areas difficult to implement. 6. <u>Consider diagnostic aspects:</u> highlight the need 	

AGREED	Date of next meeting 3-4th May 2018, in the new UICC offices.	