



ESTRO 37

20-24 April 2018
Barcelona, Spain

PROGRAMME
OVERVIEW

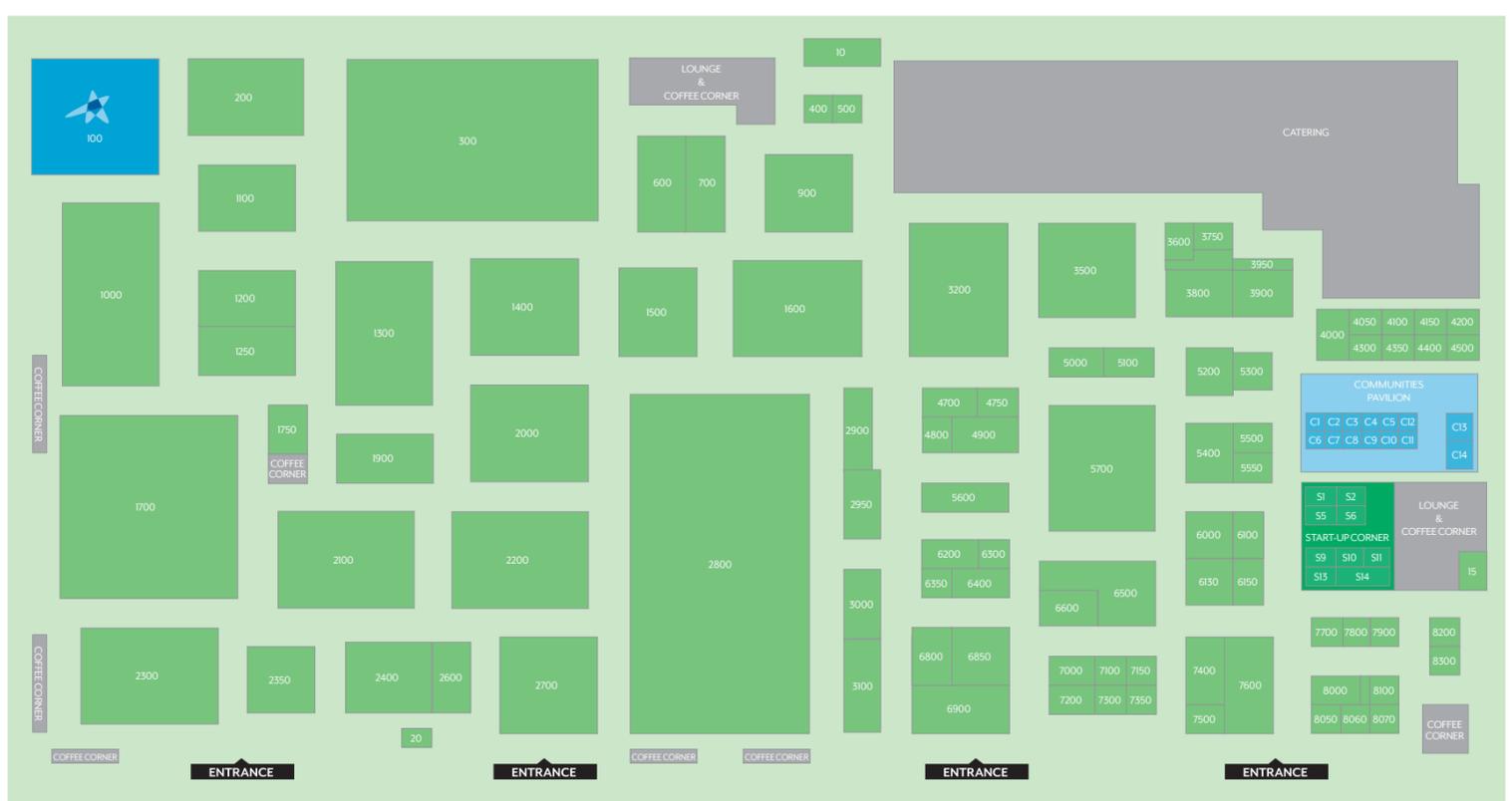
Innovation
for Value
and Access



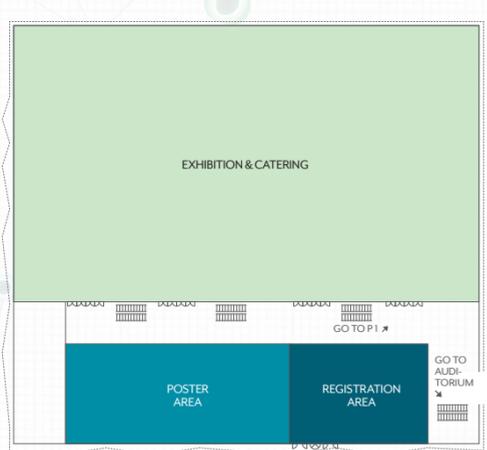
Floorplan

3D BOLUS INC.	8060	GOLD ANCHOR	7200	RTSAFE P.C.	7400	START-UP CORNER	
A2J HEALTHCARE	4800	GUANGZHOU RENFU MEDICAL EQUIPMENT CO. LTD	6100	S.I.T. - SORDINA IORT TECHNOLOGIES SPA	3800	ALPHA TAU MEDICAL LTD.	S1
ACCURAY	1700	HITACHI EUROPE LTD	6150	SCANDIDOS - DELTA*	1900	ANATGE	S5
ADANI	7100	HUMEDIQ	3100	SHENZHEN TENGFEI YU TECHNOLOGY CO. LTD	400	EHMEDTX	S9
AEP LINAC	4300	IBA PROTON THERAPY	1400	SIEMENS HEALTHCARE GMBH	2200	HEALTHCARE MOBILE SOLUTIONS OY	S10
AQUILAB	3000	IBA DOSIMETRY	1500	SIHO MEDICAL DEVICES	4150	MD ARGE YAZILIM HIZMETLERI A.S	S13
ARIANE MEDICAL SYSTEMS LTD	3750	INTRAOP	6900	SKY FACTORY	7800	MEDICAL PRECISION B.V	S14
AUGMENIX	2950	IOP PUBLISHING	4100	SPECTRONIC MEDICAL AB	6300	NEOLYS DIAGNOSTICS	S2
HELSINN HEALTHCARE SA	8100	IRT SYSTEMS GMBH	5400	STANDARD IMAGING, INC.	5600	NU-RISE LDA	S11
BEEKLEY MEDICAL	4500	KLARITY MEDICAL PRODUCTS	600	STRATPHARMA SWITZERLAND	4050	PHANTOMX	S6
BEHYAAR CO	4400	LAP GMBH LASER APPLIKATIONEN	1250	SUN NUCLEAR CORPORATION	2300		
BEST MEDICAL INTERNATIONAL	3500	LIFELINE SOFTWARE, INC / RADCALC	6850	SUN NUCLEAR CORPORATION: PATIENT ALIGNMENT	2350	COMMUNITIES PAVILION	
BIONIX RADIATION THERAPY	5300	MACROMEDICS BV	1200	SUREMARK COMPANY	7300	ALATRO - LATIN-AMERICAN ASSOCIATION OF ONCOLOGY RADIANT THERAPY	C10
BIOPROTECT LTD / GMBH	4900	MED COM GMBH	4350	TECHNA INSTITUTE, UNIVERSITY HEALTH NETWORK	7500	ASCO - AMERICAN SOCIETY OF CLINICAL ONCOLOGY	C13
BRAINLAB	1600	MEVION MEDICAL SYSTEMS	200	TECNOLOGIE AVANZATE	1750	EFOMP - EUROPEAN FEDERATION OF ORGANISATIONS FOR MEDICAL PHYSICS	C1
CABLON MEDICAL B.V.	6000	MICROPOS MEDICAL AB	5200	TELEDYNE EZV	6350	EIBIR - EUROPEAN INSTITUTE FOR BIOMEDICAL IMAGING RESEARCH	C4
CANON MEDICAL SYSTEMS EUROPE	7600	MIM SOFTWARE INC	6200	UAB "VPC"	7700	ESO - EUROPEAN SCHOOL OF ONCOLOGY	C14
CARBOFIX ORTHOPEDICS LTD	500	MIRADA MEDICAL	6600	VARIAN MEDICAL SYSTEMS INTERNATIONAL AG	2800	GEMELLI ADVANCED RADIATION THERAPY CENTER	C12
CARL ZEISS MEDITEC AG	2600	MODUS MEDICAL DEVICES INC	6400	VARIAN/MOBIUS MEDICAL SYSTEMS	2900	IRISH INSTITUTE OF RADIOGRAPHY AND RADIATION THERAPY	C6
CDR SYSTEMS	8000	NELCO LTD	700	VERITAS MEDICAL SOLUTIONS	3900	ISTITUTO DEL RADIO "OLINDO ALBERTI" - BRESCIA	C2
CEMAR ELECTRO INC	4000	ONCOLOGY SYSTEMS LTD	7900	VERTUAL LTD	4700	PROTON COLLABORATIVE GROUP	C8
CIRS	5550	ONCOTHERM GMBH	8200	VIEWRAY, INC	5700	RSRMO - ROMANIAN SOCIETY OF RADIOTHERAPY AND MEDICAL ONCOLOGY	C7
CIVCO RADIOTHERAPY	2100	OPASCA GMBH	6500	VISION RT LTD	3200	SEOR - SPANISH SOCIETY FOR RADIOTHERAPY AND ONCOLOGY	C3
C-RAD POSITIONING AB	2400	ORFIT INDUSTRIES	2000	WISEPRESS MEDICAL BOOKSHOP	3950	UNIVERSITY OF FLORENCE	C9
DIB RADIATION PROTECTION	4750	PAR SCIENTIFIC A/S	5500	WOLF-MEDIZINTECHNIK GMBH	900	WIELKOPOLSKIE CENTRUM ONKOLOGII/ GREATRE POLAND CANCER CENTER	C11
DOSISOFT	7000	PHANTOM LABORATORY INC	7150	XOFT, A SUBSIDIARY OF ICAD, INC	6800	PUBLICATION AREA	C5
DR SENNEWALD MEDIZINTECHNIK GMBH	3600	PHILLIPS	1300	X-RAYDOORS	4200		
DYN'R	8050	PTW	1100	XSTRAHL LTD	5100		
ECKERT & ZIEGLER BEBIG SA	900	QFIX	2700				
ELEKTA	300	QUALIFORMED SARL	6130				
ELSEVIER BV	100	RAD TECHNOLOGY MEDICAL SYSTEMS	5000				
EPIDOS	7350	RADIOLOGY ONCOLOGY SYSTEMS, INC	8300				
ESTRO - EUROPEAN SOCIETY FOR RADIOTHERAPY AND ONCOLOGY	100	RAYSEARCH LABORATORIES AB	1000				
GAMMA-SERVICE RECYCLING GMBH	900	RS&A, INC.	8070				

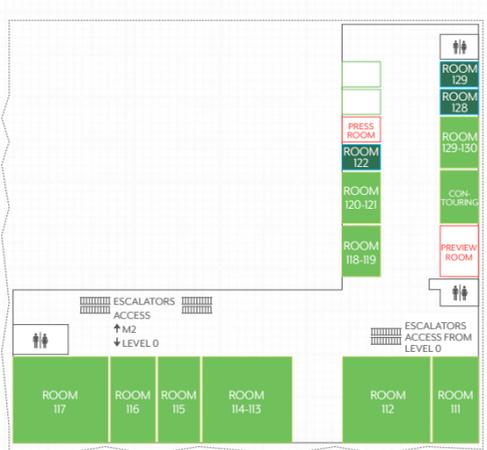
■ GOLD CORPORATE MEMBER ■ CORPORATE MEMBER



FIND YOUR WAY AT ESTRO 37



LEVEL 0



LEVEL P1



LEVEL M2

MEETING ROOMS
CONFERENCE ROOMS

MEETING ROOMS



FRIDAY 20 APRIL 2018

ROOM 116	ROOM 120-121	ROOM 113-114	ROOM 118-119	ROOM 115	ROOM 131-132	ROOM 129-130
INTERDISCIPLINARY PRE-MEETING COURSE	RADIOBIOLOGY PRE-MEETING COURSE	PHYSICS PRE-MEETING COURSE	RTT PRE-MEETING COURSE	CLINICAL PRE-MEETING COURSE	CONTOURING WORKSHOPS	ESTRO COURSE
8:30-17:30 Combined SBRT and targeted-immune therapies: biological and clinical perspectives	8:30-17:30 Radiobiological basis of clinical particle therapy	8:30-17:30 MRI physics for applications in radiation oncology	8:30-17:30 Clinical implementation and use of MR-imaging in external beam radiation therapy	8:45-17:30 Radiation for lymphoma: updated role, new guidelines and present/future developments	8:00-10:00: Liver SBRT 10:30-12:30: Lung SBRT 13:30-15:30: Intra-prostatic relapses 16:00-18:00: Rectal cancer	8:45-17:00 Foundations of leadership in radiation oncology. Joint ESTRO-CARO-RANZCR
17:40 - 18:25: PRE CONGRESS SATELLITE SYMPOSIUM						
18:30 - 19:15: OPENING CEREMONY - AUDITORIUM						
19:20 - 20:50: NETWORKING EVENING - EXHIBITION AREA						

SATURDAY 21 APRIL 2018

	ROOM 116	ROOM 120-121	AUDITORIUM	ROOM 117	ROOM 129-130	ROOM 112	ROOM 113-114	ROOM III	POSTER AREA	ROOM 115	ROOM 131-132
08:00 - 08:40	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE			
	Radiation-induced cardiac toxicity: what have we learnt?	Measuring the systemic immune-modulated effect of radiation	Optimal sequence in the treatment of breast cancer: radiotherapy first?	Standard of care in the treatment of bladder cancer	Brachytherapy improvement calls for improved imaging	Incorporating radiomic parameters into predictive models: methods for variable selection	Dual energy CT in radiotherapy: principles and potential	Patient involvement and shared decision making			
08:45 - 10:00	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	POSTER VIEWING 1		
	★ Partial organ treatments to minimise late radiation effects	Radiotherapy combined with immunotherapy: mechanisms and biomarkers	More of both? Breast reconstruction and regional lymph node irradiation	Current issues in the treatment of muscle-invasive bladder cancer	Do we need adjuvant vaginal BT in endometrial cancer?	Is radiomics going to deliver on the promises that dose painting made?	Is dose calculation in proton therapy clinical practice a solved problem?	Patient centered care and monitoring side effects: review clinics and follow up	Lung		
10:00 - 10:30: COFFEE BREAK											
10:30 - 11:45	SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 2		
	★ Improving radiation therapy by avoiding side effects	Joint efforts in immune-radiobiology	Genitourinary	★ Health services research to improve value and access	Gynaecological brachytherapy	Dosimetry	Treatment planning in particle therapy	★ Innovative strategies for improving patient care	Upper GI		
12:00 - 12:30: ★ PRESIDENTIAL SYMPOSIUM Re/Mind Value, Y. Lievens (BE) - AUDITORIUM											
12:30 - 13:00: EMMANUEL VAN DER SCHUEREN AWARD LECTURE : The ESTRO School - Radiation oncology education of the highest standard for all, C. Verfaillie (BE) - AUDITORIUM											
13:00 - 14:30: LUNCH AND INDUSTRY SYMPOSIA											
13:30 - 14:30: GEC-ESTRO ASSEMBLY - ROOM 120/121											
14:30 - 15:45	SYMPOSIUM	SYMPOSIUM	JOINT SYMPOSIUM	JOINT SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	POSTER VIEWING 3	MULTIDISCIPLINARY TUMOUR BOARD	CONTOURING WORKSHOPS
	★ Lung and dose escalation	Blood borne biomarkers	★ ESTRO-ASTRO The art and science of head and neck radiotherapy	★ ESTRO-ESGO State of the art: new ESGO-ESTRO-ESP guidelines on management of cervical cancer	Quality assurance in brachytherapy	★ Multi-parametric functional imaging for patient classification, radiotherapy personalisation and response monitoring	Why is fully automated segmentation and deformable image registration not here yet?	Brachytherapy - RTT advanced roles	Dosimetry	Breast	14:30-16:30 Liver SBRT
15:45 - 16:15: COFFEE BREAK											
16:15 - 17:30	SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 4		
	★ How to minimise toxicity in pelvic malignancies in the era of precision radiotherapy	Biomarkers	Breast	Upper GI	Brachytherapy physics and technology	Functional imaging	Inter- and intra-fractional motion	Reproducibility optimisation in clinical practice	Planning applications and optimisation algorithms		
17:45 - 18:30: HONORARY MEMBERS AWARD LECTURES - AUDITORIUM Imaging in oncology - let's shape the future together, R. Beets-Tan (NL) Sustaining radiotherapy services and development in low middle-income countries, S. Gondhwiardjo (ID) Radiotherapy of Hodgkin lymphoma: revolutionary roots, challenging present, bright horizons, J. Yahalom (USA)											
18:40 - 19:40: POSTER AWARDS CEREMONY - POSTER AREA											

SUNDAY 22 APRIL 2018

	ROOM 116	ROOM 120-121	AUDITORIUM	ROOM 117	ROOM 129-130	ROOM 112	ROOM 113-114	ROOM III	ROOM 118-119	POSTER AREA	ROOM 115	ROOM 131-132
08:00 - 08:40	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE			
	Should proton therapy clinical practice move away from a constant RBE of 1.1?	Pre-clinical cancer models	Supportive care in head and neck cancer patients: self-management and eHealth	Anal cancer: can we individualise treatment?	Oesophagus cancer	Clinical implementation of adaptive radiotherapy	Things radiotherapy physicists need to know about good PET imaging practice	Image guided radiotherapy to improve treatment delivery accuracy, how far can we go?	Big data: how to handle, interpret and analyse?			
08:45 - 10:00	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	POSTER VIEWING 5		
	★ European Particle Therapy Network (EPTN)	Mouse cancer clinic; models and modalities for precision imaging and radiotherapy in small animal models	Immunotherapy to complement chemoradiation for head and neck cancer	Novelties in organ- and function sparing treatment in rectal cancer	Cosmetic appearance after brachytherapy	New developments in online adaptive MRgRT	What could replace the PTV?	★ IGRT, IGART and SGRT	Modern learning methods	Pelvic brachytherapy		
10:00 - 10:30: COFFEE BREAK												
10:30 - 11:45	JOINT SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 6		
	★ ESTRO-PROS Is there a reason not to deliver all curative pediatric treatments with brachytherapy or protons?	Imaging hypoxia -biology in clinics	Head and neck	Lower GI	Brachytherapy prostate, head and neck	MRI for treatment planning and delivery	Treatment planning I	Imaging and protocols for treatment verification		Radiobiology		
12:00 - 12:10: DONAL HOLLYWOOD AWARD : Residual setup errors after IGRT are linked to overall survival in lung and oesophageal cancers, C. Johnson (UK) - AUDITORIUM												
12:10 - 13:00: HIGHLIGHTS OF PROFFERED PAPERS - AUDITORIUM												
12:00 - 13:00: RADIOBIOLOGY COMMITTEE Meet and greet - ROOM 127												
13:00 - 14:30: LUNCH AND INDUSTRY SYMPOSIA												
14:30 - 15:45	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	DEBATE	SYMPOSIUM	DEBATE	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	POSTER VIEWING 7	MULTIDISCIPLINARY TUMOUR BOARD	CONTOURING WORKSHOPS
	Immunoradiotherapy: the critical influence of radiation dose, scheduling and dose per fraction	New strategies to target hypoxia in combination with radiotherapy	Proton therapy in head and neck cancer: patient selection, validation and future directions	★ This house believes that 5x5 Gy offers more opportunities for tailor made treatment than conventional chemoradiotherapy in rectal cancer patients	Prostate brachytherapy: LDR seeds versus HDR monotherapy	★ The technological advancement in radiotherapy in the last decade was driven by economics, not clinical needs	Applications of machine learning in radiation oncology	Advanced image acquisition and treatment verification	Medical writing and publishing	RTT	Gynaecology	14:30-16:30 Lung SBRT
15:45 - 16:15: COFFEE BREAK												
16:15 - 17:30	SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 8		
	★ Oligometastatic disease	Targeting tumour biology	Hematological malignancies/sarcoma/palliation	Gynaecology	Brachytherapy rectum and breast	Dose measurement and dose calculations	4D imaging and motion management	Image acquisition and registration		Head and neck		
17:45 - 18:15: IRIDIUM AWARD LECTURE : The dose rate effect in brachytherapy, J.-J. Mazeron (FR) - AUDITORIUM												

MONDAY 23 APRIL 2018

	ROOM 116	ROOM III	ROOM 120-121	AUDITORIUM	ROOM 117	ROOM 112	ROOM 113-114	ROOM 129-130	POSTER AREA	ROOM 115	ROOM 132-133
08:00 - 08:40	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE			
	★ A primer on value based health care	★ The systematic use of patient reported outcome measures (PROM) for the improvement of radiotherapy	DNA Repair: from mechanisms to clinical implication	Is stereotactic body radiotherapy an alternative to surgery in operable patients with stage I NSCLC?	Testis	The state of affairs with ion RBE models	Prospective risk analysis: basics and applications to treatment QA	SBRT/SRS: indications, side effects, outcomes			
08:45 - 10:00	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	DEBATE	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	POSTER VIEWING 9		
	★ Value-based radiation oncology	Radiomics - Technical and clinical challenges and opportunities	Genomic instability and DNA repair in cancer	The evolving role of radiotherapy in the management of lung cancer	★ This house believes that active surveillance is a good option for the management of low risk prostate cancer patients	Advanced dosimetry methods for dose-volume effects modelling	Dose mapping and dose accumulation	Stereotactic radiotherapy and radiosurgery	SBRT and arthritis		
10:00 - 10:30: COFFEE BREAK											
10:30 - 11:45	SYMPOSIUM	SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 10		
	★ Enhancing radiation oncology outcomes through patient involvement	Radiogenomics	Head and neck radiobiology	Lung	Prostate	Analysis of treatment outcomes	Treatment planning 2	Motion management and adaptive strategies	Images and analyses		
12:00 - 13:00: RTT COMMITTEE Meet and greet - ROOM 122											
12:00 - 12:30: SELECTED RANDOMISED TRIALS - AUDITORIUM											
12:30 - 13:00: KLAAS BREUR AWARD LECTURE : Biological precision in radiotherapy, G. McKenna (UK) - AUDITORIUM											
13:00 - 14:30: LUNCH AND INDUSTRY SYMPOSIA											
13:30 - 14:30: PHYSICS ASSEMBLY - ROOM 120/121											
14:30 - 15:45	SYMPOSIUM	JOINT SYMPOSIUM	SYMPOSIUM	DEBATE	SYMPOSIUM	SYMPOSIUM	DEBATE	SYMPOSIUM	POSTER VIEWING 11	MULTIDISCIPLINARY TUMOUR BOARD	CONTOURING WORKSHOPS
	Challenges in human resources in radiotherapy	★ ESTRO-ESR New imaging approaches for radiotherapy	Biomarker driven hypoxic modification	This house believes that treatment intensification in stage III is a dream rather than a reality	★ What's new in the management of high risk prostate cancer patients in 2018?	Outcome prediction models for radiotherapy indications - development, validation, acceptance, commissioning and application	★ Is there still a place for patient specific QA?	Focus on site - Breast	Emerging technologies: radiotherapy and physics hand in hand	Head and neck	14:30-16:30 Intra-prostatic relapses
15:45 - 16:15: COFFEE BREAK											
16:15 - 17:30	SYMPOSIUM	SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 12		
	Planning future global radiotherapy services	Normal tissue dose-response modelling across radiation modalities	Role and impact of normal RT response biology	CNS	Late-breaking abstract and practice changing trials	Emerging technologies	Audits and QA	Treatment planning and quality assurance	Prostate		
17:40 - 18:00: JENS OVERGAARD LEGACY AWARD : This is not a target volume..., V. Grégoire (BE) - AUDITORIUM											
18:00 - 18:10: ACADEMIC AWARD LECTURE - JACK FOWLER UNIVERSITY OF WISCONSIN AWARD : First clinical demonstration of online real-time liver tumor motion monitoring on a standard linac, J. Bertholet (UK) - AUDITORIUM											
18:10 - 18:30: COMPANY AWARD LECTURES - AUDITORIUM Oxygen enhanced-MRI is feasible, repeatable and detects radiotherapy-induced NSCLC hypoxia changes, A. Salem (UK) Subpathologies and genomic classifier for individualized post-prostatectomy radiotherapy, A. Berlin (CA)											
18:40: ESTRO GENERAL ASSEMBLY - ROOM III											

TUESDAY 24 APRIL 2018

	ROOM 116	ROOM III	ROOM 120-121	ROOM 117	ROOM 113-114	ROOM 112	ROOM 115	ROOM 129-130	ROOM 132-133
08:30 - 09:10	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	CONTOURING WORKSHOPS
	Navigation in the publication ethics landscape: publish or perish or...?	Risk management - Quality and safety: new EU legislation and implementation	Normal tissue stem cells and cancer stem cells in radiation response	Hypofractionated external beam radiotherapy for prostate cancer: what have we learned in the last 15 years?	State of the art in treatment of oesophageal cancer	MRI based radiotherapy - What can go wrong and how to QA?	Photon dosimetry protocols: what is new?	Treatment planning: where are we and, where are we going	08:30-10:30 Rectal cancer
09:15 - 10:30	JOINT SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	
	★ ESTRO-EORTC New strategies for a clinical research partnership?	★ Automatic planning - the challenges for success	Advances in normal tissue radiobiology	What is the limit of hypofractionation?	Brain tumours in 2018: are there still unsolved problems?	Advances in MRI simulation (MRI-only treatment planning)	In vivo dosimetry and online dose verification	Advanced planning	
10:30 - 11:00: COFFEE BREAK									
11:00 - 12:15	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	DEBATE	JOINT SYMPOSIUM	SYMPOSIUM	DEBATE	
	Implications of the ageing population for radiation oncology	Salvage prostate radiotherapy	Radiation induced senescence	Immunotherapy	★ This house believes that stereotactic radiosurgery will replace whole brain radiotherapy in patients with ten brain metastases	★ ESTRO-EFOMP CBTC in radiotherapy: Improving and sharing best practice	Dose painting - from bench to bed(?)	Autoplanning, is there still a bright future for RTIs after automation?	
12:20 - 13:20: CLOSING DEBATE This house believes that innovative radiotherapy is superior to innovative drugs to maximise value in cancer care - ROOM 112									

■ CLINICAL SESSION
 ■ INTERDISCIPLINARY SESSION
 ■ PHYSICS SESSION
 ■ RTT SESSION