

Newsletter



Renal Tumour
Study Group

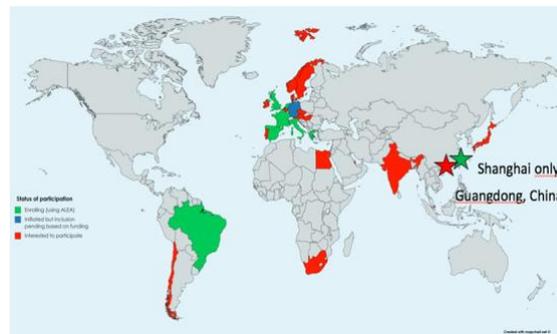
Issue 5 2019/20

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Editorial

2019 was a busy year for SIOP-RTSG. We finalized the UMBRELLA protocol and started to recruit the first patients for this study. We are still struggling to obtain a financial support. Nevertheless, up to the end of January 2020 more than 150 patients from 10 countries have been enrolled. In a monthly manner a Newsflash, produced by the SIOP-RTSG office, is send to the participants of UMBRELLA. As you can see in the map from the January issue patients are already recruited outside of Europe from South America and Asia. In the upcoming months we expect more countries to finalize the administrative work for participation, allowing us to increase the number of enrolled patients around the world, who will receive a standardized diagnosis and treatment in case of a kidney tumor.



The Randomet trial, being prepared now, will randomize metastatic Wilms Tumour patients between VAD and VCE to avoid anthracyclines in more renal tumour patients. It is expected that the first patients will enter the trial in

the first half of 2020.

Besides these efforts we are in the process of setting up a legal entity for the SIOP-RTSG. More background information is given in this Newsletter.

The SIOP-RTSG held its last year's consortium meeting during the SIOP Europe congress in Prague. In 2020 we have again a separate consortium meeting in Rio de Janeiro, hosted by Beatriz de Camargo and her team in Brazil. In addition, the SIOP-RTSG was not only busy but also very successful in having produced many scientific papers in 2019 (page 14) and on our website (siop-rtsg.eu).

We hope you will find this Newsletter informative and interesting, and we would be grateful for any feedback how to improve it.


Norbert Graf


Gordan Vujanovic

UMBRELLA

By Norbert Graf and Marry van den Heuvel-Eibrink



As written in the UMBRELLA 2016 protocol, the main mission of the International Society of the Paediatric Oncology (SIOP) Renal Tumour Study Group (RTSG) is to increase survival and to reduce acute treatment toxicity and late effects in all children, adolescents and young adults diagnosed with any renal tumour. In this context, the SIOP-RTSG is aiming to offer all these patients the same standardized high-quality diagnostics and treatment, independent of the tumour type, the socio-economic status or the geographic region where the patient is living. To achieve these goals, the UMBRELLA 2016 protocol was developed. In this respect kidney cancer in childhood will serve as a paradigm for other diseases, which is in line with the goals of SIOP Europe.

The current SIOP UMBRELLA 2016 integrated research and diagnostic protocol (part A) serves as an entry for including all children with a renal tumour in Europe and other participating centres in the SIOP-RTSG. Subsequently, treatment of each patient with a renal tumour is recommended according to the SIOP UMBRELLA 2016 treatment guidelines (part B), which provides treatment strategies for all patients with Wilms' tumours or with other renal tumours. These recommendations are mainly based on the results of the previous SIOP and COG trials. According to the results of the SIOP 2001 trial all children with localized stage II and III intermediate risk tumours will receive no doxorubicin in the postoperative chemotherapy anymore as the new standard of care. The detailed clinical treatment guidelines and follow up protocols for all renal tumours in children and young adults are available to all participating partners, and we encourage every country to participate in the registration. Standardized treatment for Wilms' tumour will allow a prospective validation of prognostic biomarkers like 1q gain and others that help for a better stratification of treatment in future trials.

Country	NL	Italy	Brazil	Greece	Spain	Shanghai	France	UK	Total
JUN'19	3	1	0	0	0	0	0	0	4
JUL'19	2	6	3	4	2	0	0	0	17
AUG'19	2	5	0	0	0	0	0	0	7
SEPT'19	3	1	4	0	1	1	0	0	10
OCT'19	2	5	5	1	4	1	2	1	21
NOV'19	2	4	3	0	6	2	0	7	24
DEC'19	3	8	3	1	2	6	0	5	28
JAN'20	2	3	1	2	2	0	0	0	10
FEB'20	3	4	10	0	1	0	0	5	23
Total	24	41	29	9	20	10	2	20	155

In our last Newsletter the procedure for participation in the UMBRELLA 2016 Study was clearly described. All regulations and administrative issues have been solved by these countries up to now. We expect that at least eleven countries will be initiated in March. Other countries are in the process of having their participation in the UMBRELLA 2016 Study approved, and it is expected that all European countries will join the Study in 2020, and that many countries outside Europe will be able to join as well. A critical step in participation is the negotiation of the Sponsor contract for non-European countries as they need to accept the European Data protection regulation as a standard for data protection and safety within the UMBRELLA Study.

An update of enrolled patients and upcoming issues is given in monthly newsflashes that are produced by the SIOP-RTSG office. This office, which used to be located in the Amsterdam (AMC) in the past, now moved to the location Princess Máxima Center for Pediatric Oncology in Utrecht. Still incoming paper forms and the archives of SIOP 2001 will also move to Utrecht in 2020. The SIOP office team supports the initiation and registration process, including organizing monthly DM meetings for sharing registration issues, and is available for all logistic DM and initiation questions. (SIOP-Umbrella-DM@prinsesmaximacentrum.nl). The newsflashes, prepared by Prakriti Roy, central datamanager and Chantal van Kempen, international trial manager for UMBRELLA, can be found in our Intranet Website (<http://siop-rtsg.eu>) under Monthly Interim Reports. Up to now 7 newsflashes have been issued. In the last one the number of patients by country is given as in the table above.

In summary, the inclusion of new patients is constantly increasing, new countries are already initiated so that they will be able to enter new patients as soon as they have obtained approval from their ethical committee, delivered the details of contacts of involved members of the national representatives, provided a signed sponsorship contract and finalized the provided ALEA training. Remote data entry is working smoothly. The different panels from radiology to pathology are working to provide reference opinions in due time in all countries. The collection of biomaterials has started as well, so that we can await excellent results of the UMBRELLA Study in the future.



SIOP office Utrecht: Chantal van Kempen, Parkriti Roy Marry M van den Heuvel-Eibrink

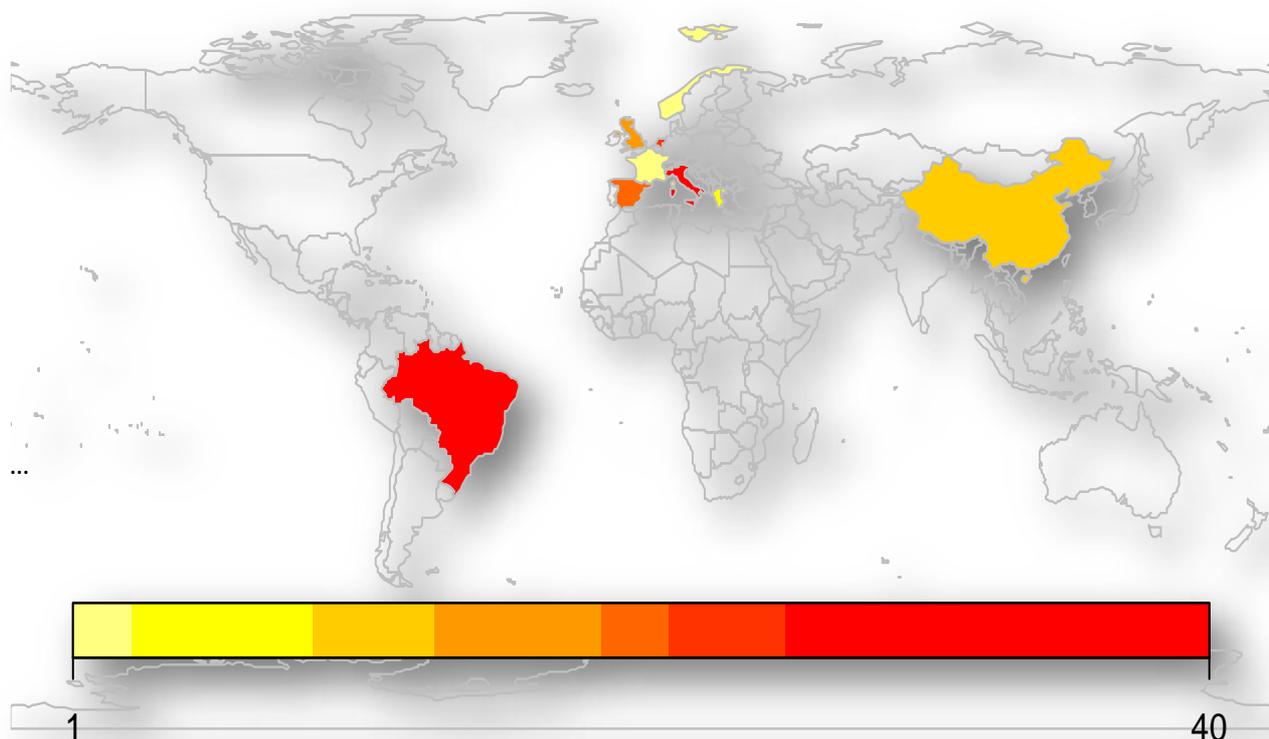
Data Management

By Harm van Tinteren and Prakriti Roy – located in Amsterdam at NKI



The Web-based data management system (ALEA) build by Harm van Tinteren and Danny Baars, supported by the Steering Committee through M.M. van den Heuvel-Eibrink and Norbert Graf is now fully functioning. More than 150 patients worldwide are registered (see figure below). Central data management is performed by the SIOP office in Utrecht in close collaboration the Netherlands Cancer Institute. The first impression is that it is really going to take a joint effort to get all the forms completed.

Uploading of radiology images is facilitated and reviewing images together is possible through invitation. The organizer of a joint assessment can invite other clinicians by sending a link (related to the images) directly to the e-mail addresses of those invited clinicians. This is in compliance with the current privacy regulations.



Worldwide accrual of patients in UMBRELLA.
 The color indicates the number of patients in a particular country.

Project organoids in relapsed renal tumours

By Jarno Drost



All participants in UMBRELLA are welcome to participate in a feasibility study for development of organoid-directed treatment of relapsed renal tumours

PIs: J. Drost, M.M. van den Heuvel-Eibrink(non-WT), A. Mavinkurve-Groothuis, R. de Krijger, F. Spreafico, J. Brok, D. Perotti(relapsed WT) in collaboration with the SIOPT RTSG group

Research Centre: Princess Máxima Center for Pediatric Oncology, the Netherlands

Description: For paediatric renal tumours, the challenge for the future is to find effective treatment options for children that suffer from resistant relapse or disease progression. Patients with advanced-stage, diffuse anaplastic, and blastemal-type Wilms tumour (WT) are at highest risk of relapse and are largely insensitive to conventional intensive relapse therapy. Moreover, we and others have shown that curing children with so-called relapsed non-WT, i.e. MRTK, RCC, CCSK and even subsets of CMNs is even more challenging, illustrated by overall survival rates of less than 10%. Rescuing these children with conventional intensive multimodality relapse treatment regimens is grossly infeasible. This underscores the urgent need to develop novel treatment modalities for these children. We have recently established patient-derived organoid models from several different paediatric renal tumour subtypes, including WT, RCC and MRTK. In this study, we want to grow organoids from relapsed renal tumours and establish whether subsequent compound testing can reveal novel therapeutic interventions.

Methodology for storage and shipping: We aim to collect tissues of all relapsed renal tumours and, if possible normal tissue. We will use these to establish patient-derived organoid cultures for compound testing. Histological slides (of the particular tissue site) for confirmation of histological subtype, or histological report thereof should be available. Samples can be processed, viably stored and shipped as follows:

At 4C: After resection/biopsy, transfer tissue directly (without mincing) to conical 50 milliliter tube containing any kind of tissue culture medium (DMEM, RPMI) supplemented with antibiotics (pen/strep). Material can be shipped with ice packs. Please make sure the tube with tissue + medium is not in direct contact with the ice packs. You can, for instance, wrap the tube(s) in tissues/napkins to protect them from freezing. Organoids cannot be generated from tissue frozen without any kind of cryoprotectant (e.g. DMSO)!

Viably Frozen: After resection/biopsy, mince the tissue (1mm³ pieces) and take up in any kind of tissue culture medium (or fetal bovine serum) containing 10% DMSO. Transfer to cryovial and incubate overnight in freezing container at -80C. The next day, the cryovial can be transferred to liquid nitrogen. Samples have to be shipped on dry ice.

Logistics: Organoid-compound screen research is covered by the METC approval of the SIOPT UMBRELLA 2016 protocol. All initiated countries can therefore participate based on their obtained METC approval. A standard MTA for collaboration will provided to be signed by participating countries and the Princess Maxima Center.

Results of compound screens will be communicated to local PIs of the center that has send the material (with a cc to the NCs of the particular country), as well as the above indicated relapsed kidney tumor study team, and not with individual patients.

Material can be sent to (after announcement by sms and/or email to):

J. Drost

Prinses Maxima Centrum voor kinderoncologie

Heidelberglaan 25 /3584 CS Utrecht/ T + 31 (0)88-97 272 72

Room number: 2-5 F3

Pathology

By Gordan Vujanic



As the first patients started being recruited and registered in the UMBRELLA 2016 Study, the National and Regional Pathology Panels have started dealing with them as required. Some of us experienced minor problems with access to the ALEA, but they are being solved, and hopefully this is going to run smoothly. In the meantime, even before the first UMBRELLA patients were recruited, the Pathology Panel continued with its regular review meetings, which were used for fine tuning of our own criteria and better understanding how to deal with these cases. Since the last Newsletter, we had review meetings in Stockholm (with only Northern European Panel participation, hosted by our past chairman Bengt Sandstedt, who wanted to clear his desk from over 100 outstanding cases that we sent to him over the last few years), Warsaw, and Milano, and further meetings in 2020 have already been planned. We are well aware how important our task is, and how demanding it is going to be, but are determined to deliver the best possible review, within the given timeframe, and hope that the participating centres will be sending their cases according to the agreed procedure.

A pathology meeting with the pathologists participating in SIOP Wilms Tumour Africa project, which was planned for June 2019 in Accra (Ghana) had to be postponed until 2021. We also established contacts with pathologists in Shanghai (China) who are considering the introduction of rapid central pathology review for their patients, and we are offering advice and support whenever asked. One of the pathologists who is likely to be doing central pathology review is planning to visit Doha and get some training there.

We are very pleased that one of our colleagues, Dr Ariadne H.A.G. Ooms, has successfully defended her PhD on “Wilms tumour: towards integration of histopathological and genomic characteristics” on 12 November 2019, at the University of Utrecht. Her mentors were Prof Dr Marry M. van den Heuvel-Eibrink and co-promoters Dr Ronald de Krijger and Dr Jarno Drost.



Our members have published some papers on pathology topics (please see the list of publications) and have been actively involved in other projects.



News from the Radiology Panel

By Jens-Peter Schenk and Hervé Brisse



After general acceptance of CRR (centralized radiology review) in participating countries of the UMBRELLA protocol, these countries developed technical solutions for CRR. Aim is to get digital reports of the radiological CRF (case report form) which can be included in the patient's study data after anonymization of the data.

Internet based conversation of treating hospital, native study center and radiological reference center is essential to avoid treatment delay in future and to get acceptance of CRF in the treating hospital. Digital systems can avoid the tremendous work of writing, sending and converting the report in the study data.

Aim of the radiological efforts should be the development of a digital network of radiologists for reference radiology in each country. These native reference centers work on their own responsibility because of native laws and regulations by using national server-based solutions.

In 2019 Anne Smets, Amsterdam, finished her active engagement for personal reasons. The radiology panel group and the co-chairmen of the SIOF-RTSG are grateful for her input in implementation of the idea of reference radiology and leading the group of radiologists for years. Her well-adjusted personality enabled a well-balanced division of work in the panel. She started the first radiology panel meeting in Amsterdam to connect the reference radiologists in the panel group. Thank you very much, Anne. We wish you the very best for your private and professional future.

The radiology panel decided to appoint Jens-Peter Schenk as the chairman of the panel and Hervé Brisse as co-chairman of the group.

Current SIOF-RTSG –Radiology members and core group of the panel are:

- Jens-Peter Schenk, Germany
- Hervé Brisse, France
- Annemieke Littooi, the Netherlands
- Enrique Lederman, Brazil
- Carlo Morosi, Italy
- Øytein Olsen, UK
- Karoly Lakatos, Austria
- Ana Coma, Spain

SIOF-RTSG Radiology panel members work together, e.g. in evaluation of CRF in the initial phase of UMBRELLA.

Current research projects in renal tumors in childhood with the impacts of panel members cover the diagnostic potential of DWI (Diffusion Weighted Imaging) imaging for risk stratification and differential diagnosis of renal tumours as well as the diagnostic value of imaging in an interdisciplinary context with other medical disciplines.



News from the Radiotherapy Panel Update of integration of Modern Irradiation Concepts and Techniques

By Christian Rübe and Patrick Melchior

The interobserver multicenter contouring study on flank delineation (Delphi) with eleven European participants centers of radiooncologists, initiated in 2017/2018 by the Radiotherapy-RTSG panel group of Germany, Netherlands and United Kingdom, is nearly finalized and will hopefully result in an improved interobserver variability and will be describing a quality assurance process.

After several video conferences and panel meetings, the Radiotherapy addendum for the Umbrella protocol on IMRT/IGRT in kidney tumours for use in those countries and dedicated subset of radiotherapy centers where this approach of reduced target volume is available and feasible, is nearly finalized. The next step will be to add this amendment to the current umbrella protocol and submitted to ethics as soon as possible. A manuscript based on the consensus findings and quality assurance process for modified target volume delineation is under way.

A prospective observational multicenter study protocol on highly conformal flank RT in patients with kidney tumour, based on this amendment, will be generated. Furthermore, as a part of the quality assurance process to ensure a high quality and less variation of treatment planning (avoidance of geographic misses by highly conformal approaches) and improve quality of further database analysis for radiation related issues, a central review of target volume delineation and dose distribution is mandatory prior to onset of radiotherapy. A peer review process for RT-imaging-based planes via a central online platform is needed. Based on the German GPOH-experience there is a possibility to use DICOM based data/imaging exchange systems via online platforms. On the European level the use of the RTOG based Online Platform system "QUARTETT" could be a possible approach for registered SIOP-Umbrella patients. Furthermore, it will be also necessary to establish the way of uploading of RT images via ALEA system for all patients independently of affiliation.

Current SIOP-RTSG-Radiotherapy Panel

- Christian Rübe (Chair, Germany)
- Patrick Melchior (Germany)
- Geert Janssens (The Netherlands)
- Davila Fajardo (The Netherlands)
- Daniel Saunders (United Kingdom)
- Farid Alam (United Kingdom)
- Aymeri Huchet (France)

Some participating countries

Poland

By Wojciech Pietras

There are 17 pediatric oncological departments in Poland, all of which will be recruiting patients for the UMBRELLA study. The coordinating centre is Wroclaw Medical University.

Poland has over 38 million inhabitants, and every year about 30-40 new renal tumours are diagnosed.

SIOP2001 protocol is still valid for a short period of time. There are intensive preparations to implement UMBRELLA Study. Currently, we have obtained the approval of the ethical committee for the implementation of the UMBRELLA Study in the coordinating centre in Wrocław. This approval is the basis for the submission to the ethical committees in other centres in Poland.

Currently, we are at the stage in talks with the Polish Academy of Sciences about developing the most effective solution for banking biological material.

Due to the difficulties in storing the biological material (in the local patient's treating centre or transport to the coordinating centre in Wrocław), at the moment we are not able to determine the number of centres included in the biological material banking. We hope that approximately 20 patients per year will have at least tumor material collected, because just so many patients are operated on in the Wroclaw center by prof. Jan Godziński.

We hope to include the first patient in the study very soon.



Slovenia

By Simona Avcin

Slovenia has one national pediatric oncology center, located at the Clinical Department of Haematology, Oncology and stem cell transplantation at the University Children's Hospital in our capital Ljubljana. Our country has 2 million inhabitants and we have 3-4 new children diagnosed with a renal tumour per year. Our group for diagnostic evaluation, treatment and follow up consists of a pediatric oncologist, radiologist, urologist, pathologist and radiotherapist, all of them dedicated to the field of pediatrics, having weekly-based case discussions.

We also have long term tradition and expertise in cytology, hence we perform the upfront cytological evaluation for almost all of the children with renal tumors. Prof. Gordan Vujanic has been our referral pathologist for many years.

Our children with renal tumors had been recruited into the SIOP-RTSG studies from the very beginning since Slovenian Pediatric Radiotherapist, Professor Berta Jereb, had been one of the founding members of the group. Therefore, we would be honoured and pleased to continue this work by registering the patients into the UMBRELLA 2016 Study.



The Netherlands

By Marry van den Heuvel-Eibrink



In the Netherlands care for children with renal tumors has been centralized since November 2014 in the Princess Máxima center for Pediatric Oncology. In the first 5 years we have built an expert center for renal tumor care, set up a translational research setting and build an infrastructure (SIOP-RTSG office) for the central data management of SIOP-RTSG-UMBRELLA.

A multidisciplinary care team has treated 162 patients that presented with a renal tumor in these 5 years, of which 75% were Wilms tumors, and 25% other renal tumors! All patients are discussed during 2 multidisciplinary solid tumor boards per week. Aimed diagnostic standards (central revision of pathology and radiology (DWI-MRI), and clinical genetics) have been implemented and innovative treatment options (IMRT, NSS, drugable target development for difficult cases) have been developed.

Renal tumor research focusses on improving outcome (by development of novel models for drug development, identifying cells of origin, genetic susceptibility of renal tumors), as well as decreasing serious relevant early and late toxicity. In the Netherlands, the SIOP RTSG Umbrella protocol was opened in Spring 2019, and 24 patients have been included so far. The Randomet study is being prepared for initiation.

Some logos of our partners:



Please send us your logo and we will add it on our SIOP-RTSG Website

IMPORT Report

By Kathy Pritchard-Jones and Reem Al-Saadi

In the UK, the UMBRELLA study has been handled as an international extension of the IMPORT study. Great Ormond Street Hospital continues as national study sponsor, with new agreements in place with the international study sponsor, under the auspices of the SIOPT Renal Tumours Study Group (SIOPT-RTSG). The IMPORT study registered 692 patients between Oct 2012-Feb 2020. The primary and secondary aims in both studies are the same. UK participation in UMBRELLA has received ethical approval as a substantial amendment to the IMPORT study. Prof Kathy Pritchard-Jones is the UK chief investigator.



In September 2019 we invited the 20 participating UK Principal Treatment Centres for a “kick off” meeting in London. This was held as part of the bi-annual meeting of the Children’s Cancer and Leukaemia Group (CCLG) Renal Tumour Special Interest Group. This is chaired by Dr Sucheta Vaidya (Royal Marsden). A clinician attended from each of the centres, including the Republic of Ireland, and there was discussion of the planned changes to the national clinical guidelines for diagnosis and treatment of childhood renal tumours, to align them with UMBRELLA part B that represents internationally agreed ‘standard of care’. At the same time, data managers attended a training session that was co-hosted by Mrs Reem Al-Saadi, the UK study manager, and the SIOPT data management team from the Princess Maxima Center, The Netherlands, Prof Marry van-den-Heuvel-Eibrink and Ms Prakriti Roy (via weblink).

As of 17th February 2020, 11 centres have now opened UMBRELLA and have started registering patients through the eRDE system ALEA. We are in touch with the remaining 9 centres and are supporting them to open UMBRELLA as soon as possible. Until then, they can continue to register new patients in IMPORT so that we don’t miss out on new patients in their centres. Due to sponsor responsibilities, Ireland which used to be part of IMPORT will have to apply to join UMBRELLA as a separate country and we are also supporting them to do this.

To 17th February we registered 18 patients onto UMBRELLA.

The updated CCLG clinical guidelines were published on the CCLG website, members’ area, in January 2020. An update on biopsy guidelines will be published soon.

An update on the UMBRELLA study was presented during the CCLG Winter meeting on the 27-28 January 2020, and the NCRI trials meeting on the 30th January 2020.

On Feb 6th 2020, we held a further successful meeting of the Wilms tumour Link Group, dedicated to parent and patient involvement and engagement (PPIE) in research. We discussed a new project that will link the clinical trial datasets with each patient’s national cancer registration record, for long term health outcomes research using linkage to routine health care data by the population-based cancer registries.

Parents and patients met in Birmingham on the 6th February 2020 with the UK UMBRELLA team to discuss future relevant projects.

Later this month (27/02/2020) we will launch our newly funded project named after the charity that has kindly donated the funds, The Little Princess Wilms Tumour Knowledge Bank.



SIOP Congress in Lyon, France, 2019

By Christophe Bergeron (local organizers)



The 51st Congress of the 'Société Internationale d'Oncologie Pédiatrique' (SIOP) was held in Lyon, the second largest city of France from October 23rd to 26th 2019. Altogether 2696 participants from 108 countries did participate, which is a new record. Thanks to the Christophe and his

Team for such a great meeting. Here his invitation to the congress:

"Fifty years ago, in November 1969 in Madrid, Spain, our masters decided to set up the SIOP community. It was not for glory or celebrity; they realized that sharing experience was an absolute necessity in order to accelerate research and to develop more efficient and effective treatments. Since this day, International SIOP meetings have maintained the same spirit. The caregivers, such as nurses, surgeons, paediatric and radiation oncologists involved in the care of children and teenagers with cancer and their parents from all around the world meet every year to share results, experience, difficulties, progress and new tools, enriching each other. In this sense the meeting in Lyon was a unique and magical event where each caregiver could add their personal touch to improve knowledge or met their seniors to learn more."

Many thanks to Christophe for a great meeting with so many participants from all over the world!

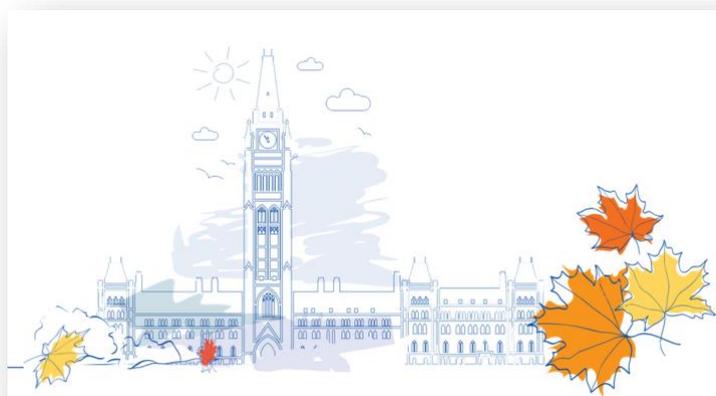
SIOP Congress in Ottawa, Canada, 2020

<https://siop-congress.org/>

2020 SIOP congress will take place in Ottawa, Canada. Please find a Welcome letter of our President Kathy Pritchard-Jones here:

<https://siop-congress.org/siop-president-welcome-letter/>

There will be eight keynote lectures. One of the keynotes deals with Genomics of Renal Tumours and will be given by Manfred Gessler from Germany. Marry van den Heuvel-Eibrink will contribute on behalf of SIOP RTSG, in the Educational Day. As in the years before there is again a Young Investigator Programme, you will be able to meet the experts or attend educational lectures. But most important you should submit abstracts for free paper sessions or posters. Tailored sessions for survivors, families and support organisations (CCI) will take place. We will be happy if we can meet you in Ottawa in autumn 2020.



KEY DATES FOR YOUR CALENDAR:

- April 1, 2020** – Abstract Submission Deadline
- July 29, 2020** – Early Registration Savings Deadline
- October 14-17, 2020** – SIOP 2020, Ottawa

SIOP-Europe Annual Meeting in Valencia, Spain, 2020

<https://www.siope.eu/activities/siopes-upcoming-events/siope-2019-congress/>



Join your colleagues and leading experts from across the globe at the SIOP Europe 2020 Annual Meeting – an innovative setting dedicated to the latest developments in Paediatric Haemato-Oncology.

We invite you to join us in Valencia for an outstanding SIOP Europe Annual Meeting – the place where paediatric haemato-oncologists from throughout the world come together to learn, share and network. SIOP-RTSG will provide news about UMBRELLA, Randomet and other topics related to kidney tumours during an open session on Friday morning, 8th of May.

Read the [press release about the 1st SIOP Europe Annual Meeting](#).

Visit the event website to see the programme and register: www.siopeurope.eu

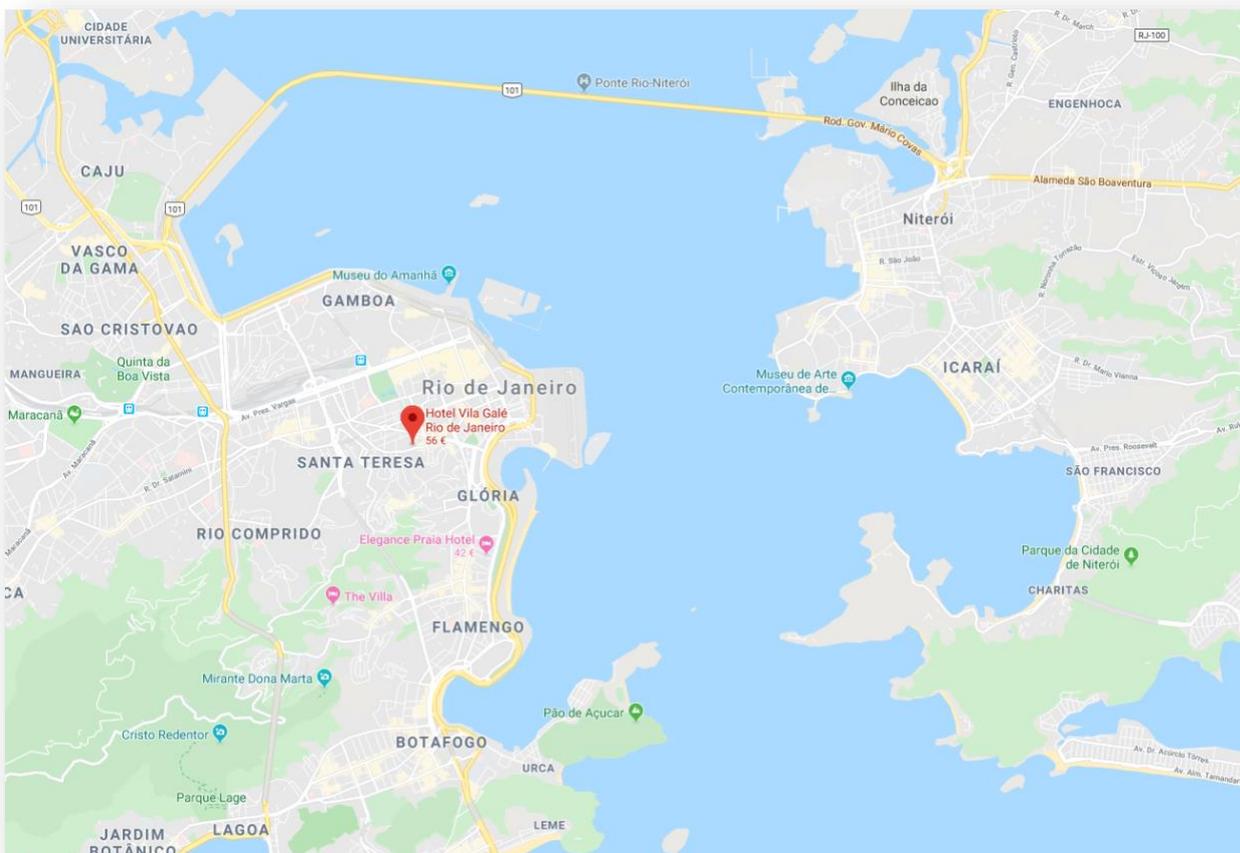
SIOP-RTSG Meeting, Rio de Janeiro, 2020

The Brazilian group is very happy to host our next SIOP-RTSG Committee Meeting in Rio de Janeiro, Brazil. It is our pleasure to invite you to this meeting on the 12th and 13th of March 2020. The meeting will be preceded by a Steering Committee meeting on the 11th of March.

The Venue will be at the hotel VILA GALE, LAPA: <https://www.vilagale.com/pt/hoteis/rio-de-janeiro/vila-gale-rio-de-janeiro>. It is a renovated hotel (old school), located at the city center (near tourist places), the rooms for the meeting are excellent. The hotel is located in a bohemia area with several bars and nightclubs.

If anyone prefers a beautiful and gorgeous place with a wonderful view can stay in Ipanema or Leblon beach. A taxi will take 30-45 minute depending on traffic and cost 7-10 euros, or in Flamengo and Urca (15-20 minutes ride and 5-7 euros). We will suggest a dinner in a nice place in Ipanema with a nice view and a small fee.

Here are pictures of the location and the Hotel, as well as impressions from Rio de Janeiro.



10th International Paediatric Renal Tumour Biology Conference, Marseille, September 23rd - 25th, 2020

This friendly and informal conference will host international experts (clinicians and biologists) and younger researchers in the field of translational research of paediatric renal tumours (Wilms and non-Wilms). The conference will reveal recent knowledge on tumourigenesis, biomarkers, tumour models, and new drug development all attempted to bridge to clinical relevance.



Why you should attend?

- If you are a busy clinician that needs a superb update and overview of renal tumour biology.
- If you are an experienced or young researcher that wants to share and discuss research data.
- If you want to better understand and explore new avenues for risk stratification and novel therapies.
- If you want to meet friendly and skilled colleagues and/or potentially get involved in research.



Find more info on the website of the conference:

<https://cancerpole-paca.com/agenda/10th-international-pediatric-renal-tumour-biology-conference/>



Publications

2019

Tim H. H. Coorens, Taryn D. Treger, Reem Al-Saadi, Luiza Moore, Maxine G. B. Tran, Thomas J. Mitchell, Suzanne Tugnait, Christine Thevanesan, Matthew D. Young, Thomas R. W. Oliver, Minou Oostveen, Grace Collord, Patrick S. Tarpey, Alex Cagan, Yvette Hooks, Mark Brougham, Ben C. Reynolds, Giuseppe Barone, John Anderson, Mette Jorgensen, G. A. Amos Burke, Johannes Visser, James C. Nicholson, Naima Smeulders, Imran Mushtaq, Grant D. Stewart, Peter J. Campbell, David C. Wedge, Iñigo Martincorena, Dyanne Rampling, Liz Hook, Anne Y. Warren, Nicholas Coleman, Tanzina Chowdhury, Neil Sebire, Jarno Drost, Kourosh Saeb-Parsy, Michael R. Stratton, Karin Straathof, Kathy Pritchard-Jones, Sam Behjati

Embryonal precursors of Wilms tumor.

Science 06 Dec 2019: Vol. 366, Issue 6470, pp. 1247-1251 doi: 10.1126/science.aax1323 -> [Abstract](#)

Treger TD, Chowdhury T, Pritchard-Jones K, Behjati S

The genetic changes of Wilms tumour.

Nat Rev Nephrol. 2019 Jan 31. doi: 10.1038/s41581-019-0112-0 -> [Abstract](#)

D'Hooghe E, Mifsud W, Vujančić GM

"Teratoid" Wilms Tumor. The Extreme End of Heterologous Element Differentiation, Not a Separate Entity

Am J Surg Pathol 43:1583–1590, 2019; doi: 10.1097/PAS.0000000000001335 -> [Abstract](#)

Hol JA, Lopez-Yurda MI, van Tinteren H, van Grotel M, Godzinski J, Vujanic G, Oldenburger F, de Camargo B, Ramirez-Villar G, Bergeron C, Pritchard-Jones K, Graf N, van den Heuvel-Eibrink MM.

Prognostic significance of age in 5631 patients with Wilms tumour prospectively registered in International Society of Paediatric Oncology (SIOP) 93-01 and 2001.

PLoS One. 2019 Aug 19;14(8):e0221373. doi: 10.1371/journal.pone.0221373. eCollection 2019.

Fajardo RD, van den Heuvel-Eibrink MM, Spreafico F, van Tinteren H, Acha T, Bergeron C, de Camargo B, Oldenburger F, Rübe C, Oue T, Leuschner I, Vujanic G, Sebire N, Coulomb-L'Hermine A, Collini P, Pritchard-Jones K, Graf N, Janssens GO, van Grotel M

Is radiotherapy required in first-line treatment of stage I diffuse anaplastic Wilms tumor? A report of SIOP-RTSG, AIEOP, JWITS, and UKCCSG

Pediatr Blood Cancer e28039, 2019; doi: 10.1002/pbc.28039 -> [Abstract](#)

Morris L, Squire R, Sznajder B, van Tinteren H, Godzinski J, Powis M

Optimal neoadjuvant chemotherapy duration in Wilms tumour with intravascular thrombus: A literature review and evidence from SIOP WT 2001 trial.

Pediatr Blood Cancer, 2019; 66:e27930; doi: 10.1002/pbc.27930 -> [Abstract](#)

Spreafico F, Dalissier A, Pötschger U, Locatelli F, Michon J, Peters C, Bader P, Bisogno G, Yeomanason D, Willasch A, van den Heuvel Eibrink M, Graf N, Dallorso S

High dose chemotherapy and autologous hematopoietic cell transplantation for Wilms tumor: A study of the European society for Blood and Marrow Transplantation.

Nature Bone Marrow Transplantation 2019; doi: 10.1038/s41409-019-0661-7 -> [Abstract](#)

Guerra JVDS, Pereira BMS, Cruz JGVD, Scherer NM, Furtado C, Montalvão de Azevedo R, Oliveira PSL, Faria P, Boroni M, de Camargo B, Maschietto M

Genes Controlled by DNA Methylation Are Involved in Wilms Tumor Progression.

Cells 17:8 pii: E921, 2019. doi: 10.3390/cells8080921 ->[Abstract](#)

Brillantino C, Rossi E, Minelli R, Bignardi E, Coppola M, Zeccolini R, Zeccolini M

Current Role of Imaging in the Management of Children with Wilms Tumor According to the New UMBRELLA Protocol.

Translational Medicine 8:1-16, 2019. doi: 10.24105/2161-1025.9.206 ->[Abstract](#)

Morris L, Squire R, Szajder B, van Tinteren H, Godzinski J, Powis M

Optimal neoadjuvant chemotherapy duration in Wilms tumour with intravascular thrombus: A literature review and evidence from SIOPWT2001 trial.

Pediatr Blood Cancer. 2019 Jul 24:e27930. doi: 10.1002/pbc.27930 ->[Abstract](#)

Vokuhl C

Seltene kindliche Nierentumoren.

Pathologe. 2019 Jul 23. doi: 10.1007/s00292-019-0638-8 ->[Abstract](#)

Kaba D, McFarlane N, Dong F, Graf N, Xujiang Ye

Nephroblastoma analysis in MRI images.

Image Anal Stereol 38:173-183, 2019 doi:10.5566/ias.2000 ->[Abstract](#)

Müller S, Farag I, Weickert J, Braun Y, Lollert A, Dobberstein J, Hötter A, Graf N

Benchmarking Wilms' tumor in multisequence MRI data: why does current clinical practice fail? Which popular segmentation algorithms perform well?

J Med Imag 6(3), 034001, 2019; doi: 10.1117/1.JMI.6.3.034001 ->[Abstract](#)

Sabine Irtan, Harm Van Tinteren, Norbert Graf, Marry van den Heuvel-Eibrink, Hugo Heij, Christophe Bergeron, Beatriz de Camargo, Tomas Acha, Filippo Spreafico, Gordan Vujanic, Mark Powis, Bruce Okoye, Jim Wilde, Jan Godzinski, Kathy Pritchard-Jones

Evaluation of needle biopsy as a potential risk factor for local recurrence of Wilms Tumour in the SIOP WT 2001 trial.

Eur J Cancer 116:13-20, 2019 doi: 10.1016/j.ejca.2019.04.027 ->[Abstract PubMed](#)

Bianca A Hoeben, Christian Carrie, Beate Timmermann, Henry C Mandeville, Lorenza Gandola, Karin Dieckmann, Monica Ramos Albiac, Henriette Magelssen, Yasmin Lassen-Ramshad, Barbora Ondrová, Thankamma Ajithkumar, Claire Alapetite, Brian V Balgobind, Stephanie Bolle, Alison L Cameron, Raquel Davila Fajardo, Stefan Dietzsch, Delphine Dumont Lecomte, Marry M van den Heuvel-Eibrink, Rolf D Kortmann, Anne Laprie, Patrick Melchior, Laetitia Padovani, Barbara Rombi, Giovanni Scarzello, Rudolf Schwarz, Klaus Seiersen, Enrica Seravalli, Nicola Thorp, Gillian A Whitfield, Tom Boterberg, Geert O Janssens

Management of vertebral radiotherapy dose in paediatric patients with cancer: consensus recommendations from the SIOPE radiotherapy working group

Lancet Oncology. 2019 Mar;20(3): e155–66 doi: 10.1016/S1470-2045(19)30034-8. ->[Abstract PubMed](#)

Thomas J. Jackson, Gordan M. Vujančić, Kathy Pritchard-Jones

Comment on: "Indications and results of diagnostic biopsy in pediatric renal tumors: A retrospective analysis of 317 patients with critical review of SIOP guidelines"

Pediatr Blood Cancer. 2019 Apr 02;;e27746 doi: 10.1002/pbc.27746. [Epub ahead of print] ->[Abstract PubMed](#)

Kathy Pritchard-Jones, Perotti D

WARNING: G-401 and SK-NEP-1 cell lines are not Wilms tumor cell lines.

Pediatr Blood Cancer. 2019; e27741 doi: 10.1002/pbc.27741. [Epub ahead of print] ->[Abstract PubMed](#)

Shazia Mahamdallie, Shawn Yost, Emma Poyastro-Pearson, Esty Holt, Anna Zachariou, Sheila Seal, Anna Elliott, Matthew Clarke, Margaret Warren-Perry, Sandra Hanks, John Anderson, Simon Bomken, Trevor Cole, Roula Farah, Rhoikos Furtwaengler, Adam Glaser, Richard Grundy, James Hayden, Steve Lewis, Frédéric Millot, James Nicholson, Milind Ronghe, Jane Skeen, Denise Williams, Daniel Yeomanson, Elise Ruark, Nazneen Rahman

Identification of new Wilms tumour predisposition genes: an exome sequencing study

Lancet Child Adolesc Health, 2019 doi: 10.1016/S2352-4642(19)30018-5. [Epub ahead of print] -

>[Abstract PubMed](#)

Jackson TJ, Williams RD, Brok J, Chowdhury T, Ronghe M, Powis M, Pritchard-jones K, Vujanic GM on behalf of the Children's Cancer and Leukaemia Group (CCLG) Renal Tumours Group

The diagnostic accuracy and clinical utility of pediatric renal tumor biopsy: Report of the UK experience in the SIOP UK WT 2001 trial

Pediatr Blood Cancer, 2019, doi: 10.1002/pbc.27627. [Epub ahead of print] ->[Abstract PubMed](#)

de la Monneraye Y, Michon J, Pacquement H, Aerts I, Orbach D, Doz F, Bourdeaut F, Sarnacki S, Philippe-Chomette P, Audry G, Coulomb A, Fréneaux P, Klijanienko J, Berrebi D, Zucker JM, Schleiermacher G, Brisse HJ

Indications and results of diagnostic biopsy in pediatric renal tumors: A retrospective analysis of 317 patients with critical review of SIOP guidelines

Pediatr Blood Cancer, 2019, doi: 10.1002/pbc.27641. [Epub ahead of print] ->[Abstract PubMed](#)

Illja J. Diets, Juliane Hoyer, Arif B Ekici, Bernt Popp, Nicoline Hoogerbrugge, Simon van Reijmersdal, Rajith Bhaskaran, Michel Hadjihannas, Georgia Vasileiou, Christian T. Thiel, Didem Seven, Steffen Uebe, Denisa Ilencikova, Esmé Waanders, Annelies MC Mavinkurve, Nel Roeleveld, Ronald de Krijger, Jenny Wegert, Norbert Graf, Christian Vokuhl, Abbas Agaimy, Manfred Gessler, André Reis, Roland P. Kuiper, Marjolijn C. Jongmans, Markus Metzler

TRIM28 haploinsufficiency predisposes to Wilms tumor

Int J Cancer, 2019, doi: 10.1002/ijc.32167. [Epub ahead of print] ->[Abstract PubMed](#)

Vujanic GM, Sciavo Lena M, Sebire NJ

Botryoid Wilms tumor: a non-existent "entity" causing diagnostic and staging difficulties

Virchows Archiv 474:227-234, 2019, doi: 10.1002/pbc.27549 ->[Abstract PubMed](#)

Vujanic GM, D'Hooghe E, Popov SD, Sebire NJ, Kelsey A

The effect of preoperative chemotherapy on histological subtyping and staging of Wilms tumors: The United Kingdom Children's Cancer Study Group (UKCCSG) Wilms tumor trial 3 (UKW3) experience

Pediatr Blood Cancer 66:e27549, 2019, doi: 10.1002/pbc.27549 ->[Abstract PubMed](#)

Kehl T, Schneider L, Kattler K, Stöckel D, Wegert J, Gerstner N, Ludwig N, Distler U, Tenzer S, Gessler M, Walter J, Keller A, Graf N, Meese E, Lenhof HP

The role of TCF3 as potential master regulator in blastemal Wilms tumors

Int J Cancer 144:1432-1443, 2019. doi: 10.1002/ijc.31834->[Abstract PubMed](#)

Irtan S, Messahel B, Moroz V, Taylor RF, Grundy R, Kelsey A, Vujanic G, Pritchard-Jones K on behalf of the Renal Tumours Committee of the Children's Cancer and Leukaemia Group (CCLG)

Outcomes of non-anaplastic stage III and 'inoperable' Wilms tumour treated in the UKW3 trial

Radiotherapy and Oncology 131:1-7, 2019, doi: 10.1016/j.radonc.2018.10.026 -> [Abstract Pubmed](#)

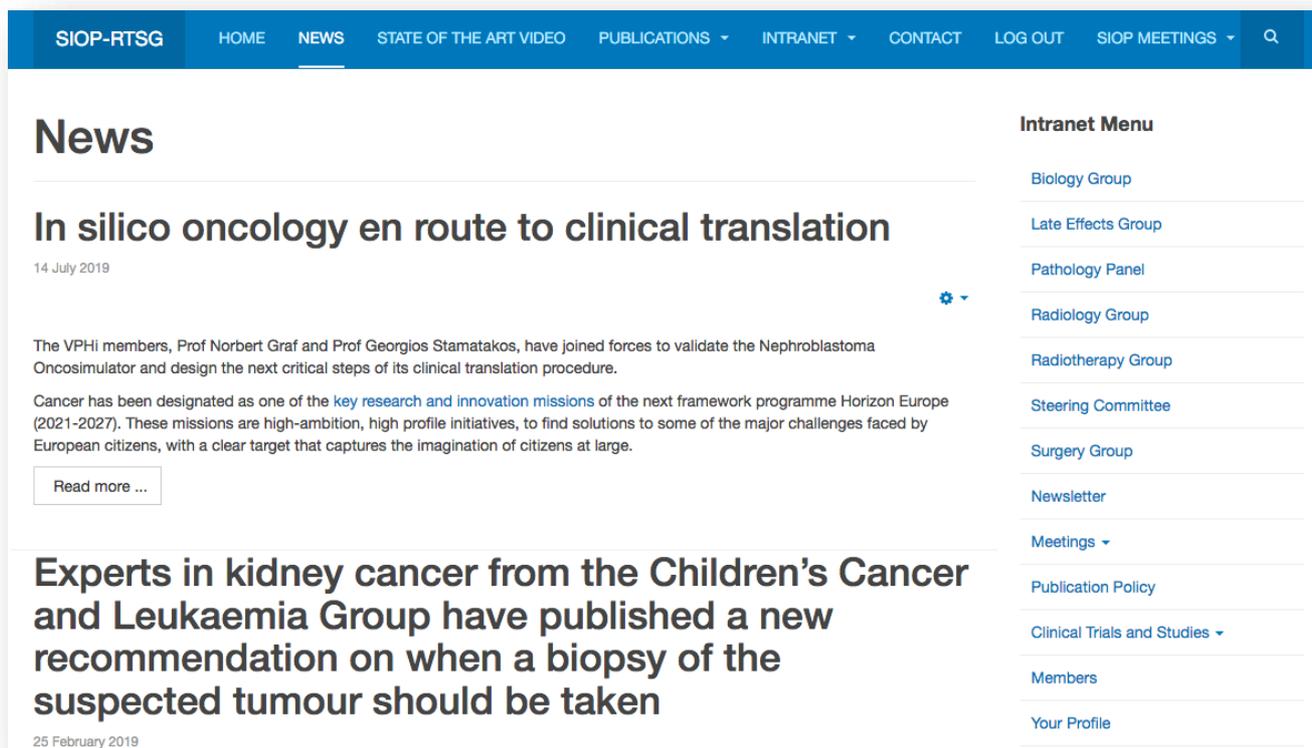
Oostveen RM, Pritchard-Jones K

Pharmacotherapeutic Management of Wilms Tumor: An Update

Paediatr Drugs. 21:1-13, 2019

Our Website

Please visit our website. Members of SIOP-RTSG can create an account for the Intranet, where the UMBRELLA protocol, CRFs and other news are shared. We are updating the content regularly.



The screenshot shows the SIOP-RTSG website interface. At the top is a navigation bar with links: SIOP-RTSG, HOME, NEWS, STATE OF THE ART VIDEO, PUBLICATIONS, INTRANET, CONTACT, LOG OUT, SIOP MEETINGS, and a search icon. The main content area is divided into two columns. The left column features a 'News' section with a featured article titled 'In silico oncology en route to clinical translation' dated 14 July 2019. The article text mentions VPHI members Prof Norbert Graf and Prof Georgios Stamatakos validating the Nephroblastoma OncoSimulator. Below the article is a 'Read more ...' button. A second article is partially visible below, titled 'Experts in kidney cancer from the Children's Cancer and Leukaemia Group have published a new recommendation on when a biopsy of the suspected tumour should be taken' dated 25 February 2019. The right column contains an 'Intranet Menu' with a list of links: Biology Group, Late Effects Group, Pathology Panel, Radiology Group, Radiotherapy Group, Steering Committee, Surgery Group, Newsletter, Meetings, Publication Policy, Clinical Trials and Studies, Members, and Your Profile.

Upcoming Meetings

12 th to 13 th of March 2020	Rio de Janeiro, Brazil	SIOP-RTSG Meeting
17 th to 20 th of March, 2020	Chicago, IL, United States	COG Spring Group Meeting
24 th to 29 th of April, 2020	San Diego, CA, United States	AACR Annual Meeting 2020
4 th to 8 th of May, 2020	Valencia, Spain	2 nd Annual SIOP Europe Meeting
29 st May to 2 nd of June 2020	Chicago, IL, United States	ASCO Annual Meeting 2020
15 th to 18 th of September 2020	Atlanta, GA, United States	COG Fall Group Meeting
23 rd to 25 th of September, 2020	Marseille, France	10 th Int. Pediatric Renal Tumour Biology Conference
14 th to 17 th of October, 2020	Ottawa, Canada	52 nd Congress of SIOP

Impressum

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