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Drug Research Unit Ghent

The Early Phase Clinical Drug
Research Unit of the University
Hospital Ghent



Mission statement

To contribute to the **development** of new drugs by conducting clinical trials (majority of them **early phase**) in **healthy volunteers** as well as in **patients**.

Since 2018 the Drug Research Unit Ghent will contribute also to the development of new drugs by conducting clinical trials in **pediatric patients** in close collaboration with the pediatric department of the University Hospital Ghent.

In compliance with international legislation and quality standards

Landmarks

D.R.U.G. Healthy subjects

- ▶ 2001: Founded by Prof. dr. L. Van Bortel
- ▶ 2003: ISO 9001:2000 certified
- ▶ 2005: Contribution to development of drugs for developing countries
- ▶ 2006: Preferred partnership contract with a top 10 global pharma industry
- ▶ 2009: ISO 9001:2008 certified

Phase I Oncology

- ▶ Part of Oncology care program initially
- ▶ NOV 2008: approval of the Phase I Unit Oncology by the medical board of the hospital; ISO 9001:2008 certified
- ▶ JAN 2009: approval of the Phase I Unit Oncology by the board and the CEO of the Ghent University Hospital
- ▶ From JAN 2011 on: 4 Key Activities supported by the hospital (Oncology, Clinical Immunology, Genetics & Neuroscience)

- ▶ 2014: Close collaboration in between both units
- ▶ AUG 2015: New facilities on the campus
- ▶ OCT 2015: Official merging of D.R.U.G. and Phase I Oncology
- ▶ Until 2017: ISO 9001:2008
- ▶ Since 2018: integration in hospital accreditation, NIAZ/Q-Mentum
- ▶ Quality system developed under ISO9001 remains applicable
- ▶ National accreditation Phase I pending

Expertise

Healthy subjects

- ▶ First in man, SD
- ▶ First in man, MD
- ▶ Phase-0 studies (eCTA) and proof of concept
- ▶ Biomarker/surrogate marker development
- ▶ Food/Drug interaction
- ▶ Bioequivalence
- ▶ Biologicals
- ▶ Special groups (hypertensives, elderly, postmenopausal women)
- ▶ Cardiovascular: telemetry, BP, arterial function & structure

Oncology

- ▶ First in man, dose escalation
- ▶ First in man, expansion cohorts
- ▶ Medical devices
- ▶ Interaction studies
- ▶ Biomarker studies
- ▶ QT studies
- ▶ Fresh biopsies

+ **Patient studies** for other hospital departments and other principal investigators

Preconditions

High Quality

Quality control

- ▶ First party (internal) audits
- ▶ Qualified internal auditors (4)
 - ▶ Scheduled on main procedures
 - ▶ Ad hoc for (near) errors
- ▶ Training in SOP (all SOPs revised within 2 years)
- ▶ Close feedback on the spot / approval system

Quality assurance

- ▶ 1 GCP-ICH third party audit/ 2 years

Preconditions

High Quality

Quality management system

- ▶ Quality manual
- ▶ Standard Operating Procedures (SOPs)
- ▶ Standard Technical Procedures (STPs)
- ▶ Forms
- ▶ Examples
- ▶ Documents

Training employees

- ▶ SOP trainings (min. 7/year)
- ▶ Training + test in GCP and national and international legislation
- ▶ BLS/AED
- ▶ Study-specific trainings
- ▶ Individual trainings in SOP's and STP's
- ▶ In the framework of patient trials: training in oncology topics, training by psychologists, ...

Preconditions

High Quality

Document management

Infrastructure

- ▶ Apparatus: temperature management and control
- ▶ Calibrated devices

Involvement of management !

Involvement of team !

Preconditions

High Quality

FDA inspection June 2015

- ▶ No Form 483 issued

FAGG Inspections

Second party audits

Facilities

- ▶ 20 beds for overnight stay
- ▶ Telemetry for 15 subjects
- ▶ 2 clinical laboratories (temperature controlled)
- ▶ 1 sample handling laboratory (temperature controlled)
- ▶ 1 drug storage room (temperature controlled/alarm)
- ▶ 5 freezers (-20°C) + 1 freezer (-70°C) (temperature controlled/alarm)
- ▶ 5 refrigerators
- ▶ 1 biohazard case
- ▶ Wifi network
- ▶ Canteen, recreation room, offices, reception, meeting room, monitor room, storage rooms and kitchen
- ▶ Biosafety level 1

Key processes

- ▶ Trial initiation
- ▶ Recruitment
- ▶ Conduction of the trial
- ▶ Data entry
- ▶ Archiving

Phase I Oncology Trials 2018

Patients	Mandator	Number of Trials	PI
Cancer patients	Industry (15# sponsors)	25	S. Rottey
Head & Neck cancer patients	Academic - UCL	1	S. Rottey
NPC Patients	Academic – IWT grant UZ Gent	1	S. Rottey

+ 1 observational trial

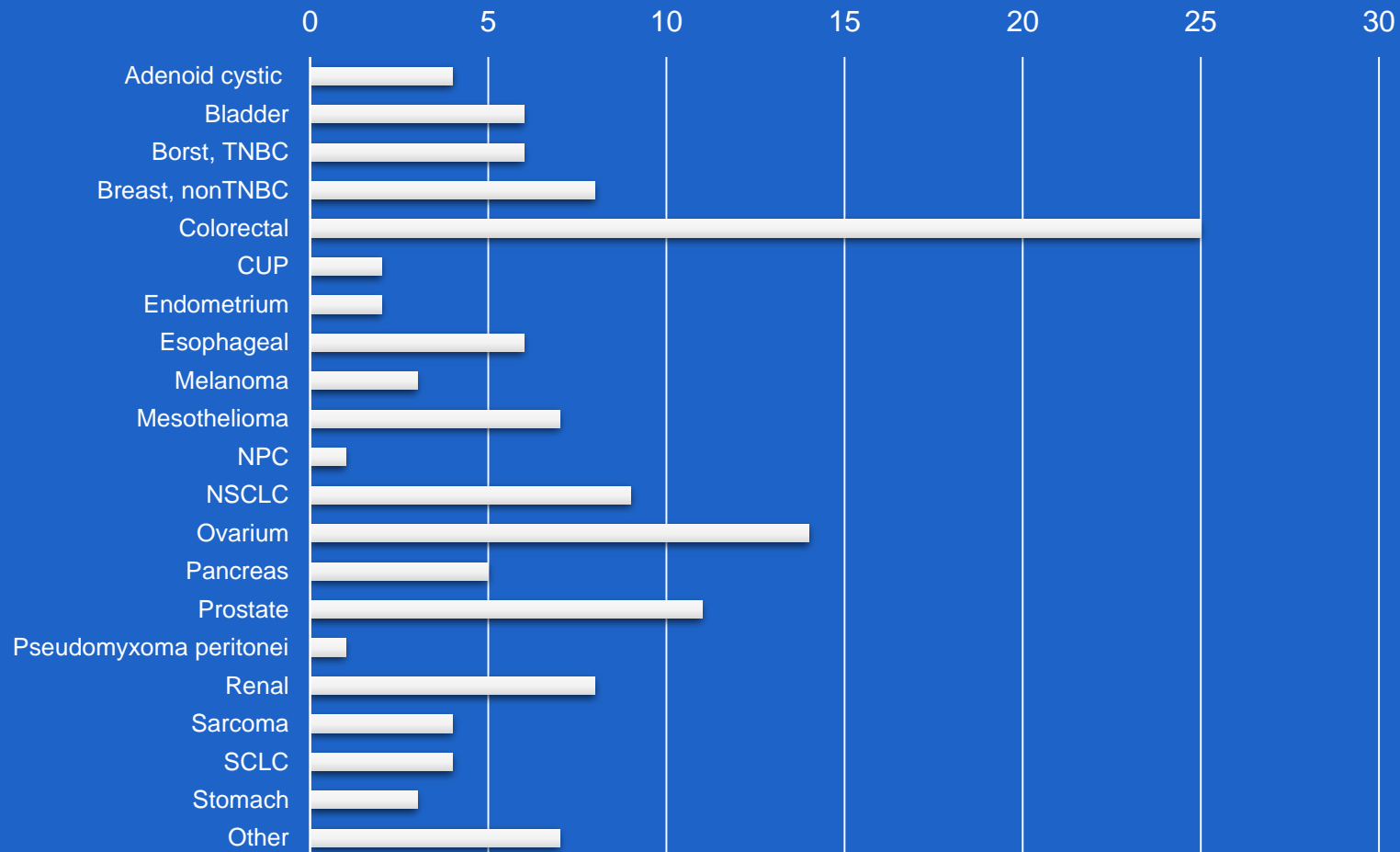
Subjects registered for Phase I Oncology trials in 2018: 134

Subjects in trial in 2018:

- ▶ 5 patients were prescreened
- ▶ 14 ongoing subjects from 2017
- ▶ 39 subjects signed main ICF

Phase I Oncology Trials 2018

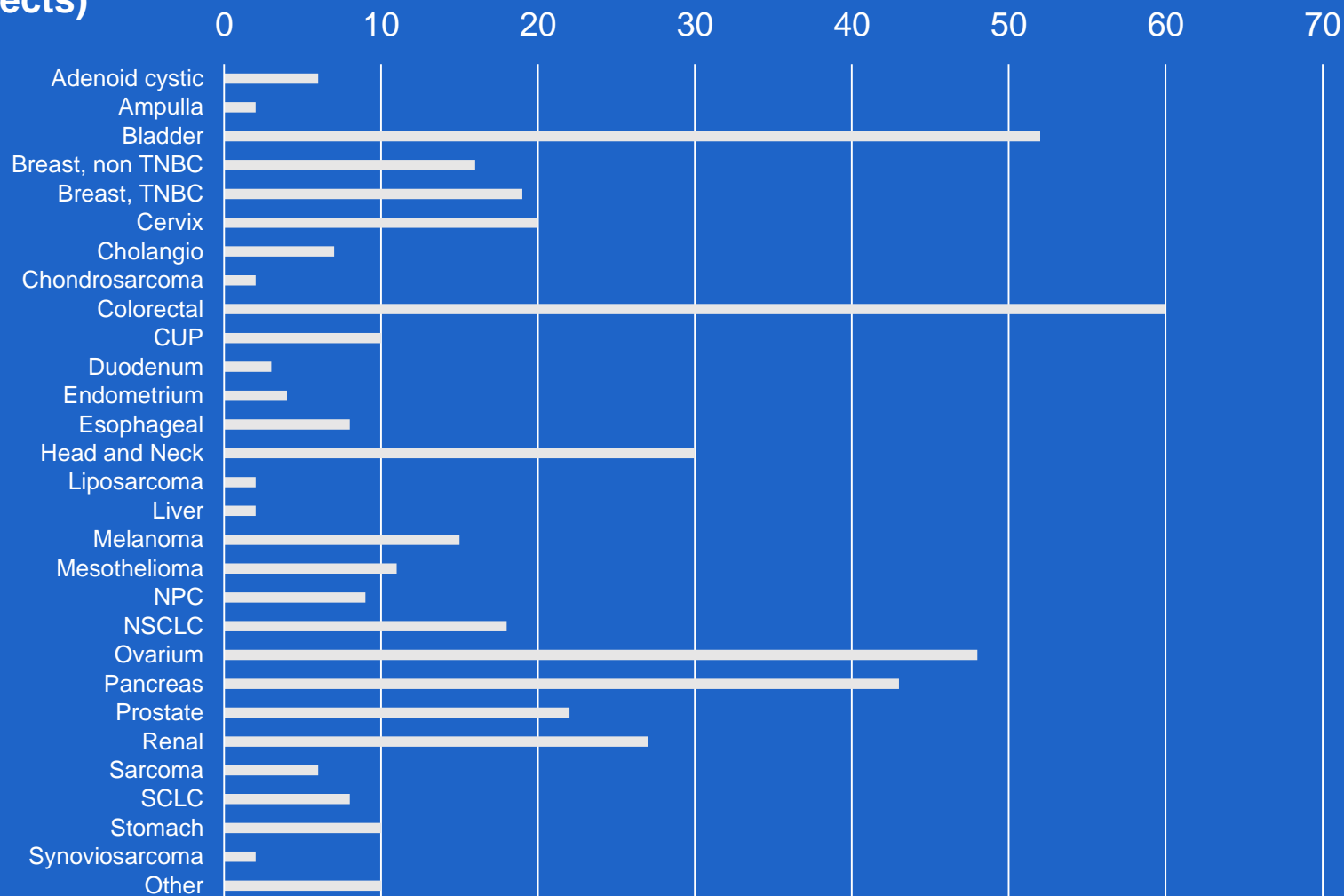
Diagnoses subjects registered for Phase I Oncology trials in 2018 (134 subjects)



Other includes tumor types which presented only once (cervix, cholangiocarcinoma, duodenum, NPC, pseudomyxoma peritonei, uterus, vulva).

Phase I Oncology Trials 2018

Diagnoses subjects registered for Phase I Oncology trials in 2016-2018 (472 subjects)



Other includes tumor types which presented only once (appendix, epitheloïd hemangioendthelioma, malignant solitary fibrous tumour, pseudomyxoma peritonei, soft tissue pyo-epithelioma, thymic, uterine leiomyosarcoma, uterus, vaginal, vulva).

Phase I Trials in Healthy Subjects 2018

Type	Mandator	Number of Trials	Number of Randomized Healthy Subjects	PI
First in Humans	Industry (2# sponsors)	3	104	S. Rottey
Other studies	Industry	3	88	S. Rottey



Summary

Centre of Excellence:

- ▶ Qualified staff
- ▶ Approval system – double control
- ▶ External audits
- ▶ NIAZ/Q-Mentum
- ▶ Accreditation phase I unit pending

Short timelines

Takes advantage of University Knowledge Centre / embedding in a University Hospital environment

Memberships



Prof. Rottey is Board Member of Eufemed
President of BSMO
President of BAPU
President of BMUC

Prof. Dr. Sylvie Rottey – Head of the Department

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