GISTT SUMMIT

Science | Translation | Therapeutics

removing roadblocks to cure

October 16th–18th 2024 in Essen, Germany

at

OKTOGON

UNESCO world heritage industrial site Zeche Zollverein

Organizing Committee

Jonathan A. Fletcher & Sebastian Bauer

Program Committee

Cristina Antonescu · Ping Chi · Ron DeMatteo · Armelle Dufresne · Johanna Falkenhorst

Suzanne George · John Glod · Candace Haddox · Michael C. Heinrich

Adrian Mariño-Enriquez · Thomas Mühlenberg · Toshi Nishida · Wenbin Ou · Lori Rink

Brian Rubin · Piotr Rutkowski · César Serrano · Andrew Wagner

Meeting Coordinator

Julia Ketzer

This 1st GISTT Summit aims to establish an in depth state of science on biology, clinical & translational strategies for Gastrointestinal Stromal Tumors, while offering expansive networking between scientists, clinical oncologists, industry, and advocacy groups to foster highest-priority collaborative projects.

gisttsummit@ume.de / www.gisttsummit.com

Scientific Program of the 1st GISTT Summit

Day 1 – Wednesday, October 16th 2024

10.30	**Registration**	
12.00	**Welcome address – introduction to formats and program** Jonathan A. Fletcher & Sebastian Bauer	
12.20	**Session 1 - KIT and PDGFRA oncogenes**	chairs: Ping Chi & Brian van Tine
12.25	▪ KIT/PDGFRA Biology: Overview	Ping Chi
12.45	▪ The role of cellular context Lessons from other neoplasms driven by KIT/PDGFRA	Michael C. Heinrich
12.55	▪ Lessons from familial GIST patients	John Glod
13.05	Summary and power pitches	
13.10	Discussion	
13.30	**Lunch Break** *You may take your food with you into the BO rooms*	
14.00	**Break Out Session – 1st round**	
15.15	**Coffee break**	
15.30	**Session 2 - Oncogenic progression following KIT/PDGFRA/NF1 mutation** Implications for signaling and treatment	chair: Roberta Maestro
15.35	▪ Oncogenic progression in KIT/PDGFRA/NF1-mutant GIST	Adrián Mariño-Enriquez
15.45	▪ mTOR regulation in GIST	Yuexiang Wang
15.55	▪ Clinical opportunities arising from oncogenic progression	Inga-Marie Schaefer
16.05	Summary and power pitches	
16.10	Discussion	
16.30	**Speed Dating** *. . . with wine and beer*	
17.30	**Poster session A**	
18.30	**End of day 1** *We are offering a bus transfer to the evening venue*	
19.00	**Evening event** – Hülsmannshof	

Scientific Program of the 1st GISTT Summit

Day 2 – Thursday, October 17th 2024

9.00	Registration	
9.30	**Session 3 – Pathology, Molecular Dx, and Machine Learning** The central steering wheel chairs: Paolo Dei Tos & Cristina Antonescu	
9.35	Molecular and histological overview and unusual GISTs	Eva Wardelmann
9.55	▪ Risk stratification: Conventional approaches and new directions	Cristina Antonescu
10.05	▪ GIST classification by deep learning	Jean-Michel Coindre
10.15	▪ AI model for recurrence prediction	Sam Singer
10.25	Summary and power pitches	
10.30	Discussion	
10.50	Coffee break	
11.05	**Session 4 – KIT and PDGFRA small-molecule inhibitors** chairs: Paolo Casali & Candace Haddox	
	Part 1 - What have we learned?	
11.10	▪ Imatinib: the unchallenged frontline	Margaret von Mehren
11.20	▪ Future role of multi-kinase inhibitors in GIST	John Zalcberg
11.30	▪ KIT and PDGFRA-specific inhibitors: Lessons from avapritinib and ripretinib	Robin Jones
11.40	Summary and power pitches	
11.45	Discussion	
12.05	Part 2 - New opportunities	
12.10	▪ To kill a chaperone and the implications of an HSP90i approval	Sebastian Bauer
12.20	▪ Hidden gems or dead horses Opportunities from phase II trials in GIST	Andrew Wagner
12.30	▪ The new kids on the block Preliminary results from ongoing trials	Suzanne George
12.40	Summary and power pitches	
12.45	Discussion	
13.05	Lunch Break – Walk & Talk	
	Grab a lunch bag and take a guided tour through the world heritage site Zeche Zollverein	
14.15	Break Out Session – 2nd round	
15.00	Coffee break	

15.10	**Session 5 - Evolution of TKI resistance** From bed-to-bench and back chairs: Kjetil Boye & Neeta Somaiah	
15.15	▪ KIT/PDGFRA resistance mechanisms	Johanna Falkenhorst
15.25	▪ Lessons from structural biology	Tom Schulz
15.35	▪ Is it really all about KIT? Evidence for relevance of additional signaling support	Jonathan A. Fletcher
15.45	▪ cfDNA to track disease – a role in cure?	César Serrano
15.55	▪ Mechanisms of resistance of KIT - Evidence and relevance	Thomas Mühlenberg
16.05	Summary and power pitches	
16.10	Discussion	
16.30	Coffee break	
16.40	**Panel Discussion #1** Newer KITi and new trials: How will these change the treatment landscape? Moderators: Ping Chi & Suzanne George Participants: Paolo Casali, Armelle Dufresne, Alessandro Gronchi, Peter Reichardt, Neeta Somaiah, William Tap, Chueh-Chuan Yen	
17.30	Poster session B	
	. . . with wine and beer	
18.30	End of day 2	
19.00	Evening event – Hudson's Metropolitan Bar & Dining	

Scientific Program of the 1st GISTT Summit

Day 3 – Friday, October 18th 2024

8.30	Registration	
9.30	**Session 6 - Surgery for metastatic GIST** No heal without steel? chairs: Sylvie Bonvalot & Alessandro Gronchi	
9.35	▪ The hen or the egg? Secondary mutations and cellular homeostasis – implications for surgery (a biological intro)	Sebastian Bauer
9.45	▪ Neoadjuvant therapy – lessons and opportunities	Toshi Nishida
9.55	▪ Lessons from pivotal adjuvant trials – who do we cure?	Heikki Joensuu
10.05	▪ Surgery during front-line TKI therapy What are the benefits and limits?	Carol Swallow
10.15	▪ Surgery in patients with TKI-resistant disease Harm or benefit in an era of novel TKIs?	Chandrajit P. Raut
10.25	Summary	
10.30	Discussion	
10.50	Coffee break	
11.05	**Session 7 - Targets beyond KIT** Maximizing therapeutic responses chairs: Andrew Wagner & Ciara Kelly	
11.10	▪ Targeting KIT oncogenic signaling pathways The (yet?) unmet promises	William Tap
11.20	▪ Co-targeting KIT/PDGFRA and genomic integrity	Lori Rink
11.30	▪ The "blueprint" of a GIST tumor - lessons from single cells	Jason Sicklick
11.40	Summary	
11.45	Discussion	
12.05	Lunch Break	
13.15	**Session 8 - Persistence and plasticity** – roadblocks to cures chairs: Sebastian Bauer & Jonathan A. Fletcher	
13.20	▪ Releasing GIST from TKI pressure Lessons & implications from the BFR14 trial	Armelle Dufresne
13.30	▪ Pathologic features of persistence	Cristina Antonescu
13.40	▪ The hidden life-lines Intrinsic and extrinsic factors of GIST cell persistence	Jonathan A. Fletcher
13.50	Summary	
13.55	Discussion	

14.15	Break Out Session – reports	
	5min report plus 10min discussion per Break Out Session	
15.30	**Panel Discussion #2** **Optimizing trial designs for GIST**	Moderators: Jon Trent & Margaret von Mehren Participants: Ping Chi, George Demetri, Candace Haddox, Michael C. Heinrich, César Serrano, William Tap, Gerard van Oortmerssen
16.30	**Final conclusions** Jonathan A. Fletcher & Sebastian Bauer	
17.00	End of the 1st GISTT Summit	

Break Out Sessions

BO #1 - Novel approaches – Pathways to cure GIST

Co-leads

Sebastian Bauer, Jonathan A. Fletcher, Suzanne George, David Josephy, Bin Li, Adrián Mariño-Enriquez, Lori Rink, Agnieszka Wozniak

This breakout considers strategies beyond targeting KIT/PDGFRA that might enable GIST cures.

- Which targets beyond KIT/PDGFRA hold the most promise? Are these KIT/PDGFRA dependent or independent?
- Dose, schedule, and delivery considerations
- Should we establish a multi-institutional, annotated, set of representative PDX and xenografts in nude mice?

BO #2 - KIT/PDGFRA Signaling

Co-leads

Ping Chi, Inga-Marie Schaefer, César Serrano, Yuexiang Wang

KIT/PDGFRA/NF1 signaling concepts will be summarized in the GISTT Summit main sessions and this breakout will pull those threads together, to explore unanswered questions. For example:

- Do some KIT 2nd mutants, e.g. V654A, signal differently from others?
- Are some downstream signaling intermediates truly universal?
- Why do some KIT mutations drive non-GIST tumors but not GIST?
- What have we learned from preclinical and clinical studies re: downstream targets in the PI3K/AKT/mTOR and RAF/MEK/MAPK pathways? What are the next steps?
- Is there a priority project that would benefit from pooling resources and models across several labs?

BO #3 - Maximizing KIT/PDGFRA Inhibition

Co-leads

Jerry Call, Neeta Somaiah, John Trent, Margaret von Mehren, Andrew Wagner

This breakout considers varied strategies to more completely inhibit oncogenic KIT/PDGFRA, and considers the following topics:

- How important is it to “completely” inhibit the oncogenic target? Can GIST death be maximized through intermittent, high-level, KITi dosing?
- What are the best future strategies for inhibiting polyclonal KITi-resistance populations? Will this be via complementary KITi combinations, or “broad-spectrum” KITi monotherapies, or indirect methods such as HSP90i? Or all of the above?
- Related to the first point: What are the mechanisms of persistence in GIST cells that are growth-arrested but survive TKIs?

BO #4 - KIT/PDGFRA-independent GISTs

Co-leads

Cristina Antonescu, Jayne Bressington, John Glod, Michael C. Heinrich, Jason Sicklick

GISTs with primary mutations of SDH genes, NF1, RAS genes, or BRAF have suboptimal clinical responses to KIT/PDGFRAi. This breakout reviews the distinctive genomic and biologic features of these KIT/PDGFRA-independent GISTs, discusses adequacy of current models, and defines novel therapeutic strategies.

GISTT

We thank our sponsors and SARC
for supporting this GISTT Summit

Platinum sponsors

GISTT

Gold sponsor

IDRx

Silver sponsors

cogent BIOSCIENCES

NewBay 新湾医药

ROAD TO THE CURE FOR GIST CANCER

von Pfeffel Pharma
it's all about LIFE!

SARC
collaborating to cure sarcoma

SARC (Sarcoma Alliance for Research through Collaboration) is a non-profit organization dedicated to the development and support of research for the prevention, treatment, and cure of sarcomas.

FORTRESS
Forum For Translational Research In Sarcomas

SASS
Strategic Advances in Sarcoma Science

The planning of the GISTT Summit was a collaboration between two meetings that have been successfully established for Sarcoma and GIST research in recent years.