FertiTOX
Fertility after gonadotoxic treatments

FertiTOX Meeting

15/24.09.2026, Frankfurt/Zoom

Agenda

D-A-CH centres

Welcome

FertiTOX

1. FertiTOX status – Recruitment & Follow-up
2. Handling missing data
3. Proposed analyses and potential abstracts for ESHRE 2027 / Articles
4. Timeline for further data collection and analysis in 2026

PredictAYA retrospective

1. Transfer of FertiTOX data to the PredictAYA registry (centre approval)
2. Ethics proposals

PredictAYA prospective

1. New PredictAYA registry (information on content, compensation and schedule)
2. Ethics proposals – what do they mean? (female, male)
3. Who is interested in participating?

Varia

FertiTOX
Fertility after gonadotoxic treatments

Recruitment
Follow-up

Participating centres

Version 15.07.2026

Austria

1. **Graz** University Hospital – Dr Marisa Viola Sammer (Feurer)
2. **Innsbruck** University Hospital – PD Dr Bettina Böttcher

Germany

1. **Berlin** Fertility Centre 'an der Gedächtniskirche' – Dr Matthias Bloechle, Dr Silk Marr
2. **Berlin** University Hospital, Charité – Prof Dr hc Jalid Sehouli, Dr Judith Altmann
3. **Berlin-Charlottenburg** Fertility Center – Prof Dr Heribert Kentenich, Dr Manja Krause
4. **Berlin-Mitte** Fertility Centre KEZ Gynaecologist Constanze Glaser
5. **Bonn** University Hospital, Venuskind am UKB – Prof Dr Nicole Sänger, Dr Norah LA Emrich, Dr Julia John
6. **Dresden** University Hospital, Carl Gustav Carus – PD Dr Maren Goeckenjan-Festag
7. **Düsseldorf** University Hospital UniKid – Prof Dr Jan-Steffen Krüssel, Prof Dr Alexandra Bielfeld
8. **Erlangen** University Hospital (Andro) – Dr Andreas Maronna
9. **Frankfurt** University Hospital – Dr Aynura Abbasova-Semiz
10. **Freiburg** University Hospital – Dr Philipp Wiehle, Dr Jasmin Asberger
11. **Gießen** University Hospital UKGM (Andro) – Prof Dr Hans-Christian Schuppe, Dr Jens Rosellen
12. **Greifswald** University Hospital – Dr Paula Spring
13. **Hamburg** Fertility Centre 'amedes experts' – Prof Dr Frank Nawroth
14. **Hannover** University Hospital MHH – Prof Dr Cordula Schippert, Dr Bettina Hertel
15. **Heidelberg** University Hospital UKHD – Prof Dr Ariane Germeyer
16. **Hildesheim** Fertility Centre – Dr Jan-Simon Lanowski
17. **Karlsruhe** Municipal Hospital – Prof Dr Andreas Müller
18. **Kiel** University Hospital UKSH – PD Dr Veronika Günther, PD Dr Sören von Otte
19. **Leipzig** University Hospital (Andro) – Prof Dr Sonja Grunewald
20. **Leipzig** University Hospital (Gyn) – Dr Julia Bartley
21. **Lübeck** University Hospital UKSH – Prof Dr Georg Griesinger
22. **Magdeburg** University Hospital OVGU – Fachärztin Carina Strecker
23. **Mannheim** University Hospital UMM– Dr Laura Maria Haag-Häulser
24. **Marburg** University Hospital UKGM (Gyn) – Dr Jennifer Muigai
25. **München** University Hospital LMU (Gyn) – Prof Dr Nina Rogenhofer, PD Dr Aurelia Vattai;
26. **München** University Hospital TUM – Prof Dr Vanadin Seifert-Klauss
27. **Münster** University Hospital UKM (Andro) – Prof Dr rer nat Verena Nordhoff, Prof Dr rer nat Stefan Schlatt, Dr Simone Bier, Dr Claudia Krallmann
28. **Münster** University Hospital UKM (Gyn) – Prof Dr Hermann M. Behre, Dr Tanja Sperlbaum
29. **Oldenburg** Tagesklinik Oldenburg – Dr Jörg Hennefründ, Biologist Gabriele Remek
30. **Saarland (Homburg)** University Hospital UKS – Dr Simona Lucia Baus
31. **Tübingen** University Hospital – Prof Dr Melanie Henes
32. **Ulm** University Hospital UniFee – Prof Dr Katharina Hancke, PD Dr Dr Karin Bundschu

Switzerland

1. **Baden** Fertility Centre – Dr Mischa Schneider, Dr Gabriele Rauscher
2. **Basel** University Hospital – Dr Ursula Gobrecht-Keller
3. **Bern** University Hospital, Inselspital – Prof Dr Michael von Wolff
4. **Chur** Cantonal Hospital Graubünden, Fontana – Dr Naomi Ventura
5. **Fribourg** Cantonal Hospital HFR – PD Dr Dorothea Wunder
6. **Genève** University Hospital HUG – Dr Federico Del Vento
7. **Lausanne** University Hospital CHUV – Dr Anna Surbone, Dr Sandrine Cuénoud
8. **Locarno** Cantonal Hospital EOC, La Carità – Dr Alessandro Santi, PhD Alessandra Fusconi
9. **Luzern** Cantonal Hospital LUKS – Prof Dr Alexandra Kohl Schwartz
10. **Luzern** Hirslanden, Klinik St. Anna – Dr Sabine Steimann
11. **St. Gallen** Yuna – Dr Vera Hungerbühler, Dr Alice Kühn-Lichtenberg
12. **Winterthur** Admira – Dr Monika Fäh, Dr Helene Saxer Gogos
13. **Zürich** 360 Grad – Dr Florian Götze
14. **Zürich** Gyn-A.R.T. – Gynaecologist Moritz Suerdieck
15. **Zürich (Küsnacht)** Gyné invitro – Dr Michael Singer
16. **Zürich** OVA-IVF Clinic – Dr Peter Fehr, Dr Nikola Robert-Fasching

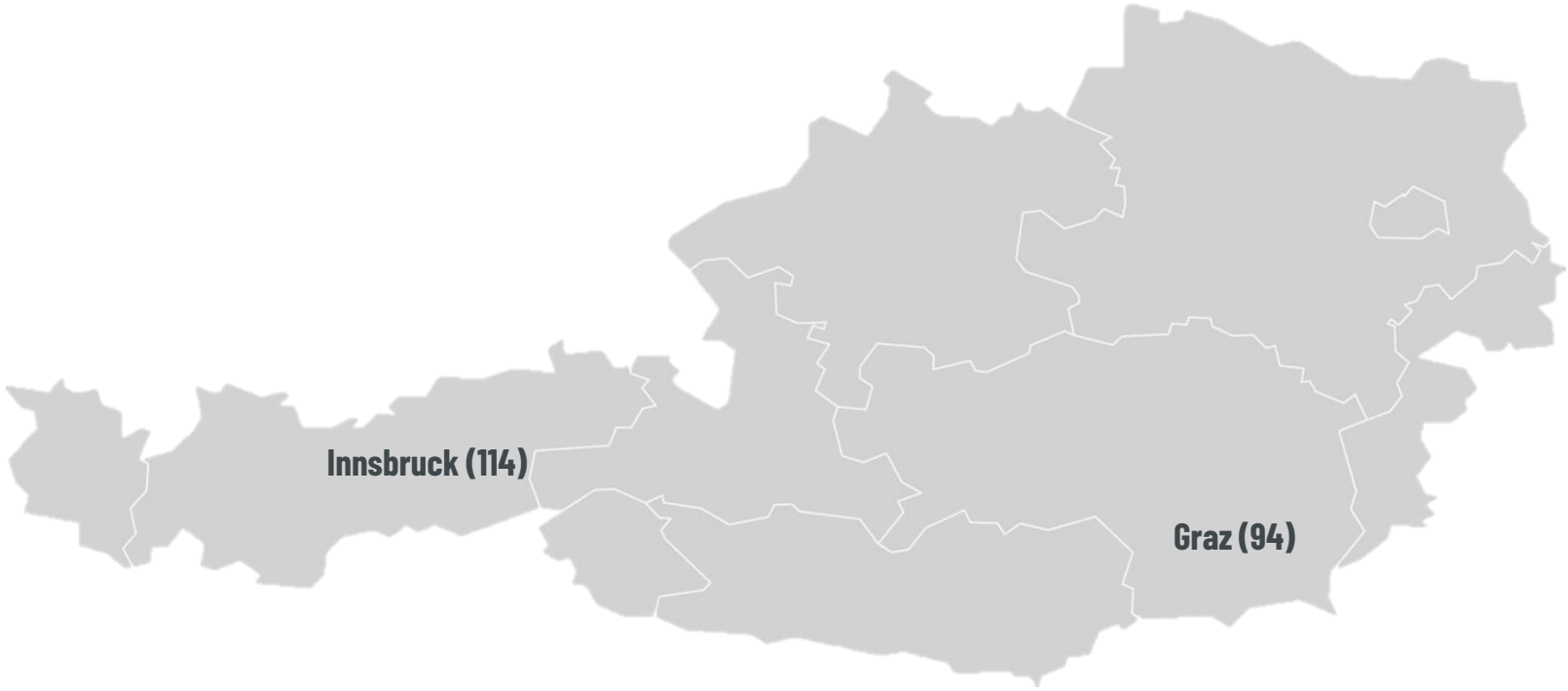
Recruitment

Germany with new centres



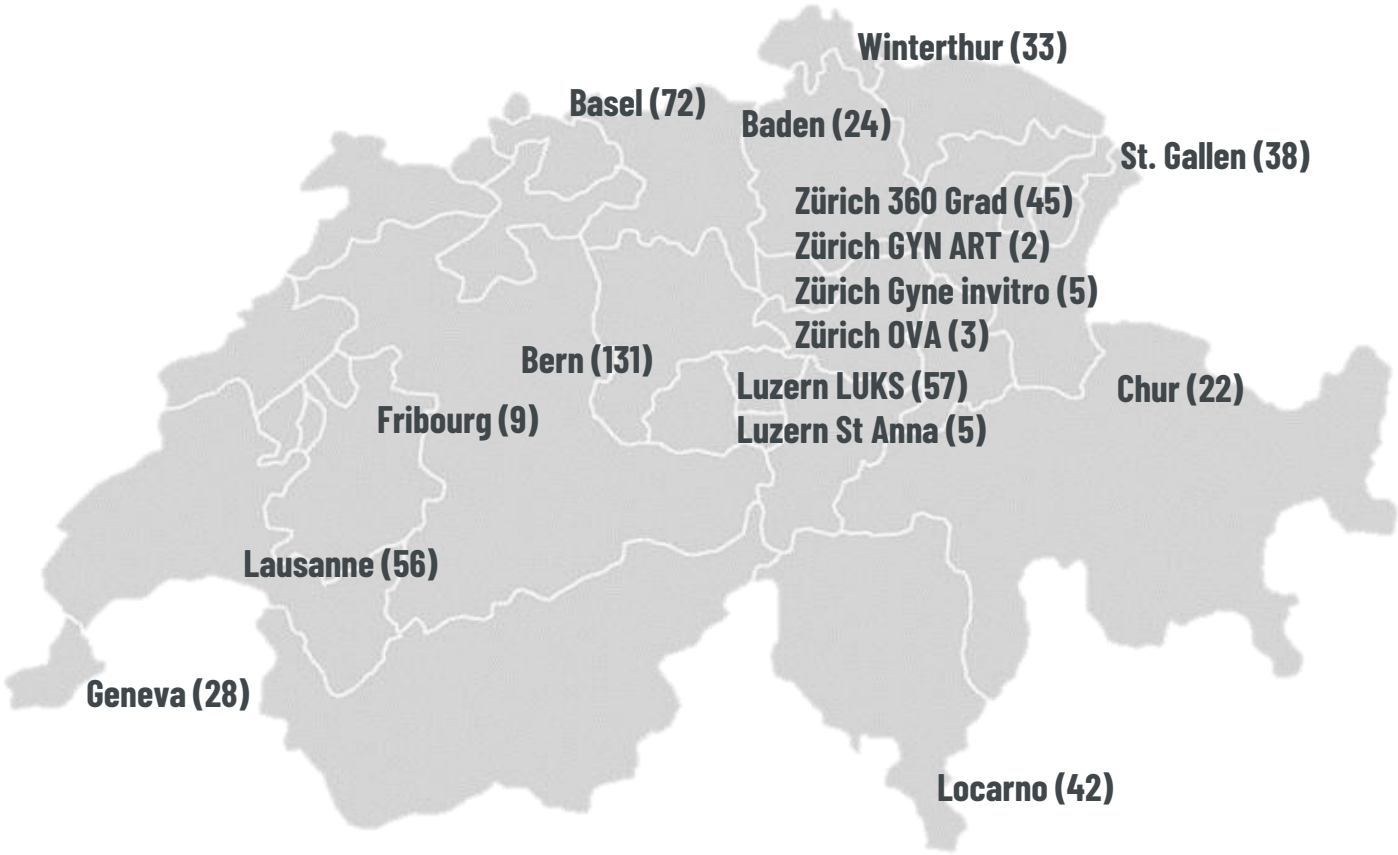
Recruitment

Austria



Recruitment

Switzerland



Follow-up

Entire REDCap registry (09.2026)

Recruited	2149 (female 54%, male 46%)
Follow-up	510 (24%)
Drop-outs	138 (6%)
Due	306 (14%)
Rest	1195 (56%)

This means that **we could almost double** the total number of follow-ups by the end of the year if all "due" follow-ups and the new follow-ups from the next three months were all addressed.

Follow-up

Germany

	Centre	Recruited	FOLLOW-UP Total	Complete	Incomplete	Drop-out	Pending
1	Berlin - an der Gedächtniskirche	4	2	**1**	1	2	0
2	Berlin - Charité	13	0	**0**	0	2	2
3	Berlin -Charlottenburg Fertility Center	62	15	**15**	0	0	18
4	Berlin -Mitte - Praxis Fertilität (KEZ)	0	0	**0**	0	0	0
5	Bonn - Venuskind am UKB	176	20	**19**	1	2	18
6	Dresden - Carl Gustav Carus	28	10	**9**	1	5	6
7	Erlangen - Uni (Andro)	12	0	**0**	0	0	0
8	Freiburg - University Hospital	56	15	**15**	0	4	29
9	Hamburg - amedes experts	30	14	**14**	0	1	1
10	Hannover - MHH	11	6	**6**	0	0	0
11	Heidelberg - UKHD	268	49	**46**	3	51	13
12	Hildesheim - Fertility Centre	115	11	**11**	0	42	26
13	Karlsruhe - City Clinic	3	0	**0**	0	0	0
14	Kiel - UKSH	5	0	**0**	0	0	5
15	Leipzig - University Hospital (Andro)	92	19	**19**	0	0	31
16	Leipzig - University Hospital (Gyn)	2	0	**0**	0	0	2
17	Lübeck - UKSH	10	0	**0**	0	0	0
18	Magdeburg - OVGU	3	0	**0**	0	0	0
19	Mannheim - UMM	5	0	**0**	0	0	0
20	Marburg - UKGM (Gyn)	3	0	**0**	0	0	0
21	München - LMU	12	0	**0**	0	0	7
22	Münster - UKM (Andro)	248	57	**53**	4	12	24
23	Oldenburg - Fertility Centre	2	0	**0**	0	0	1
24	Saarland - UKS (Homburg)	58	18	**18**	0	9	6
25	Tübingen - University Hospital	170	38	**38**	0	7	42
26	Ulm - UniFee	113	26	**26**	0	4	29
	Total	**1501**	**322 (21%)**	**204 (14%)**	**25 (2%)**	**141 (9%)**	**260 (17%)**

Follow-up

Austria

	Centre	Recruited	FOLLOW-UP Total	Complete	Incomplete	Drop-out	Pending
1	Graz - Med Uni	85	18	**3**	4	11	40
2	Innsbruck - Med Uni	112	27	**17**	1	9	3
	Total	**197**	**25 (13%)**	**20 (10%)**	**5 (3%)**	**20 (10%)**	**43 (22%)**

Follow-up

Switzerland

	Centre	Recruited	FOLLOW-UP Total	Complete	Incomplete	Drop-out	Pending
1	Baden - Fertility Centre	24	4	**2**	2	2	0
2	Basel - University Hospital	72	14	**8**	6	1	16
3	Bern - Inselspital (+Lindenhof)	131	31	**26**	5	7	30
4	Chur - Fontana	22	3	**3**	0	3	0
5	Fribourg - HFR	9	0	**0**	0	1	4
6	Genève- HUG	28	0	**0**	0	0	12
7	Lausanne - CHUV	56	4	**0**	4	2	10
8	Locarno - La Carità	42	0	**0**	0	2	11
9	Luzern - LUKS	57	1	**0**	1	8	19
10	Luzern - St. Anna	5	4	**4**	0	0	1
11	St. Gallen - YUNA	38	5	**2**	3	0	7
12	Winterthur - Admira	33	14	**13**	1	7	3
13	Zürich - 360 Grad	45	11	**1**	0	10	10
14	Zürich - GYN-A.R.T.	2	0	**0**	0	0	1
15	Zürich - Singer IVF (Küsnacht)	5	0	**0**	0	0	1
16	Zürich - OVA IVF	3	1	**0**	1	0	0
	Total	**572**	**92 (16%)**	**59 (11%)**	**23 (5%)**	**43 (8%)**	**125 (22%)**

Missing data

Handling missing data

REDCap registry

Irene and Kami regularly send you lists of missing data.
Please make sure to fill in the missing information.

Variables that are mandatory to ensure patients are not excluded:

Disease	Age	Country				
Chemotherapy	Cycles (n)	Hormonotherapy	Pelvic / Head radiation	Immunotherapy	Surgery	Changes
AMH concentration before	AMH concentration after					
Sperm concentration before	Sperm concentration after					

Handling missing data – Irene

REDCap registry

- 12 < **follow-up** < 15 (18) months time window
- Missing **ICF date**
- PREtreatment primary endpoints assessed **before** gonadotoxicity (not after)
- Oncology letters **after** gonadotoxicity (not before or during)
- Convoluted oncology letters (change in therapy **overlooked**)
- Wrong values due to **copy-paste**
- **Date typos** (e.g., around the turn of the year)

FertiTOX
Fertility after gonadotoxic treatments

Initial analyses provided by Michael & Irene (Bern)

Potential Abstracts ESHRE 2027

Primary Outcomes = Gonadotoxicity

Breast cancer current n=98

Study question: What impact do the most common chemotherapy regimens have on AMH levels?

Hodgkin-Lymphoma current n=37 (Females) + 22 (Males)

Study question: What impact do the most common chemotherapy regimens have on AMH levels?

Study question: What impact do the most common chemotherapy regimens have on sperm concentration?

Testicular cancer current n=57

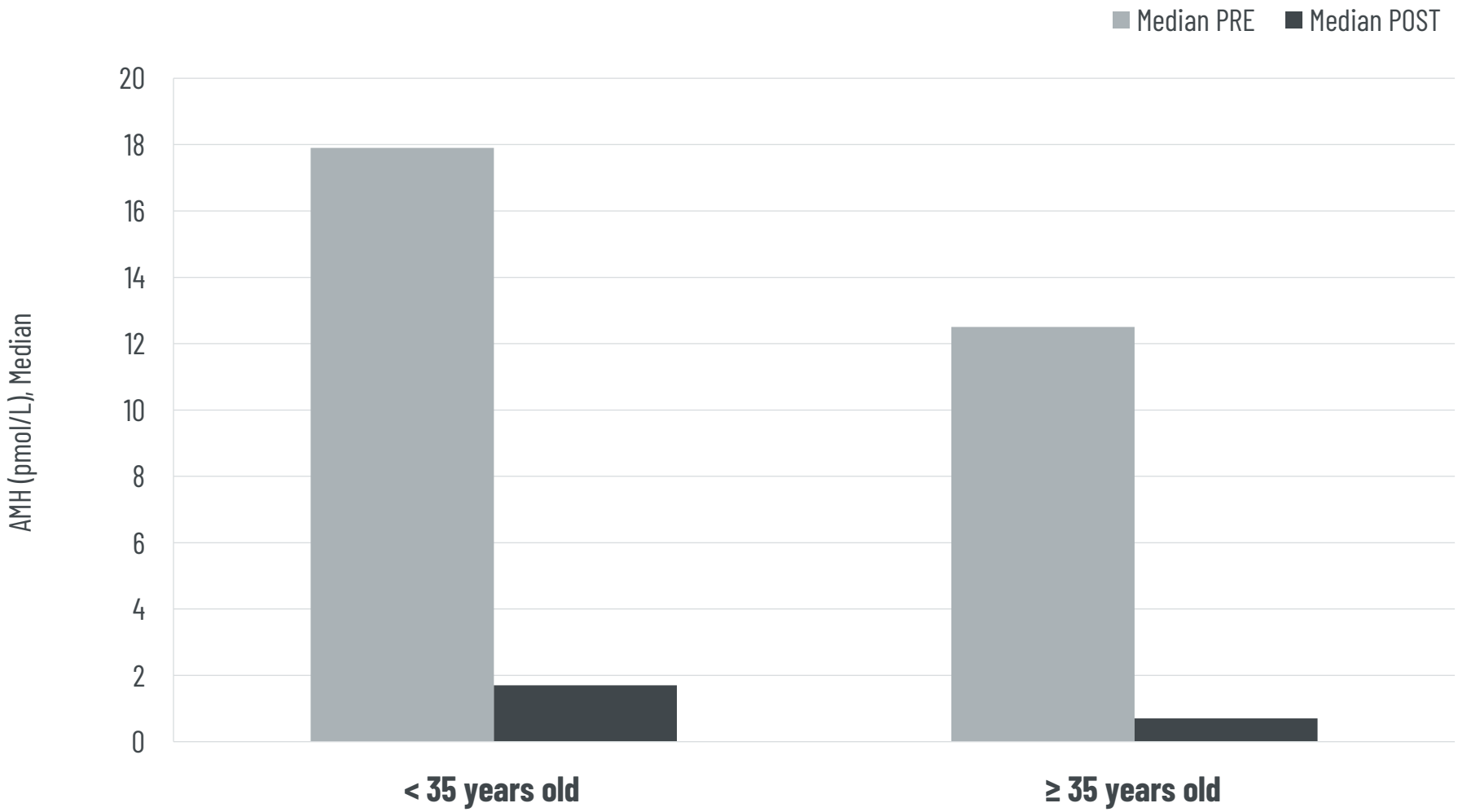
Study question: What impact do semi-orchiectomy ± most common chemotherapy regimens have on sperm concentration?

Analyses of Non-Hodgkin lymphoma, leukaemia, and sarcomas also yield very interesting data.
However, the volume of data suggests that an evaluation will not be possible for another one to two years.

Breast cancer

AMH by age group, n = 98

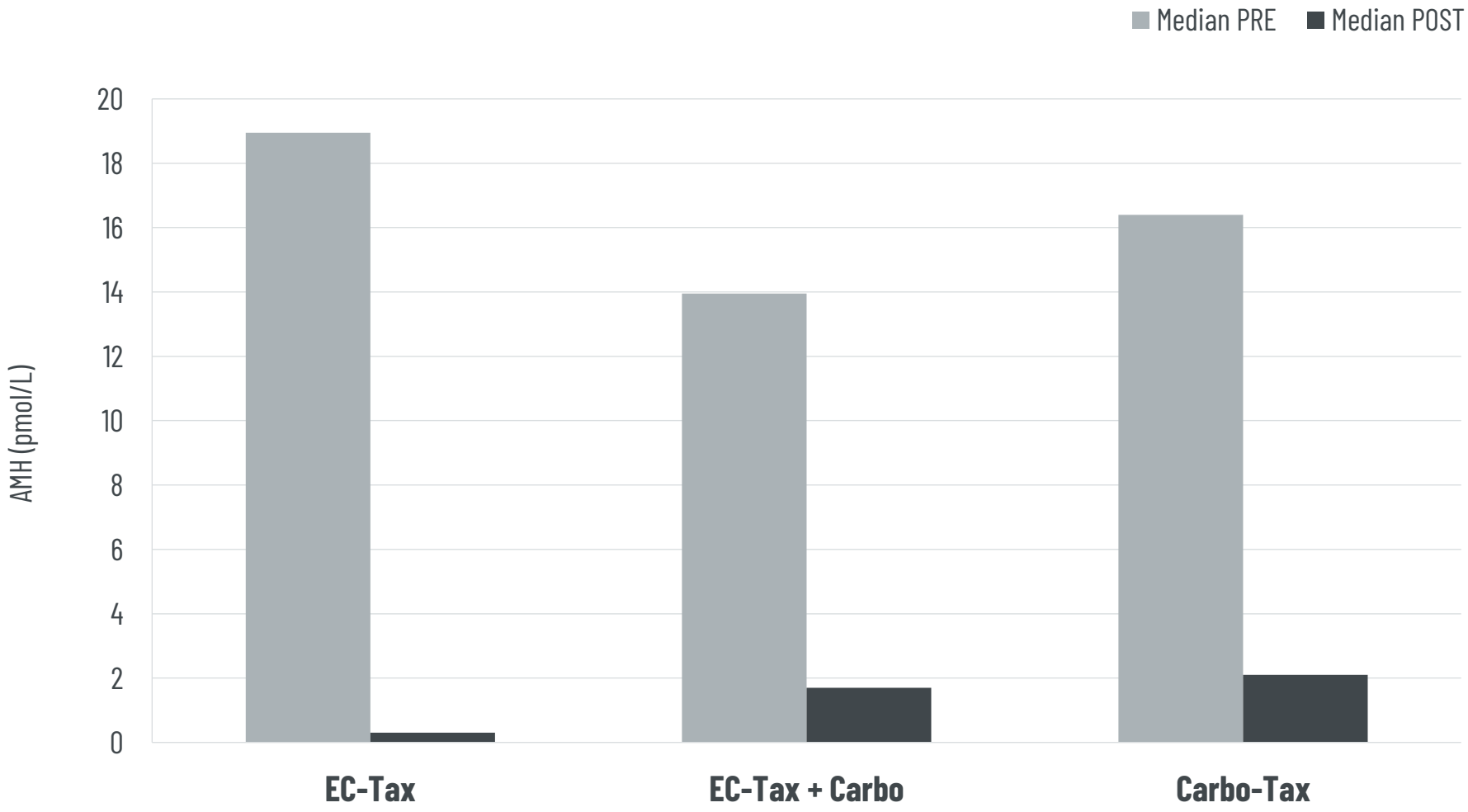
± Surgery (ovaries), hormone therapy, immunotherapy, targeted therapy, and cell therapy



Breast cancer

AMH median before and after therapy, n = 98

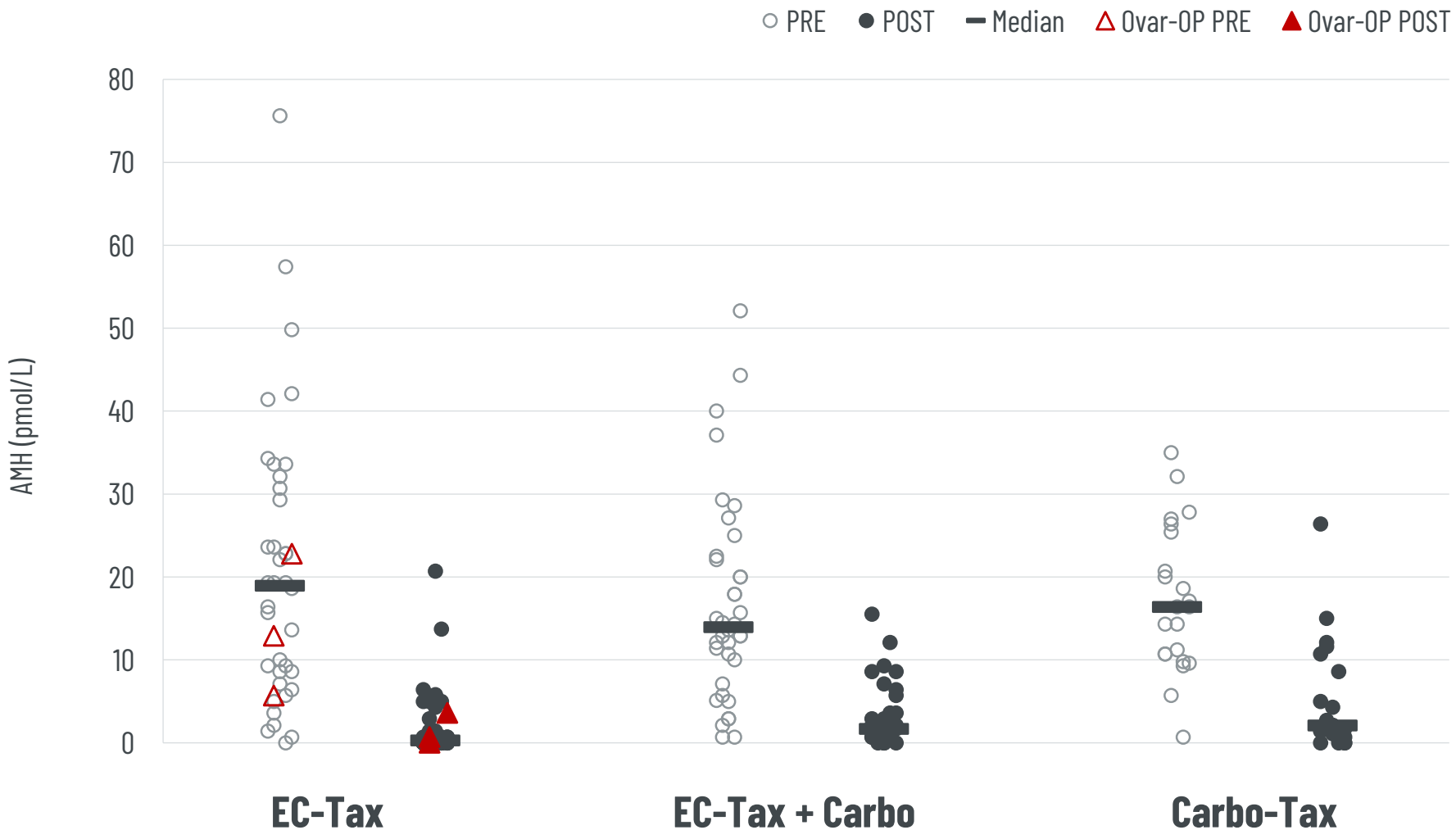
± Surgery (ovaries), hormone therapy, immunotherapy, targeted therapy, and cell therapy



Breast cancer

Each patient, with medians, n = 98

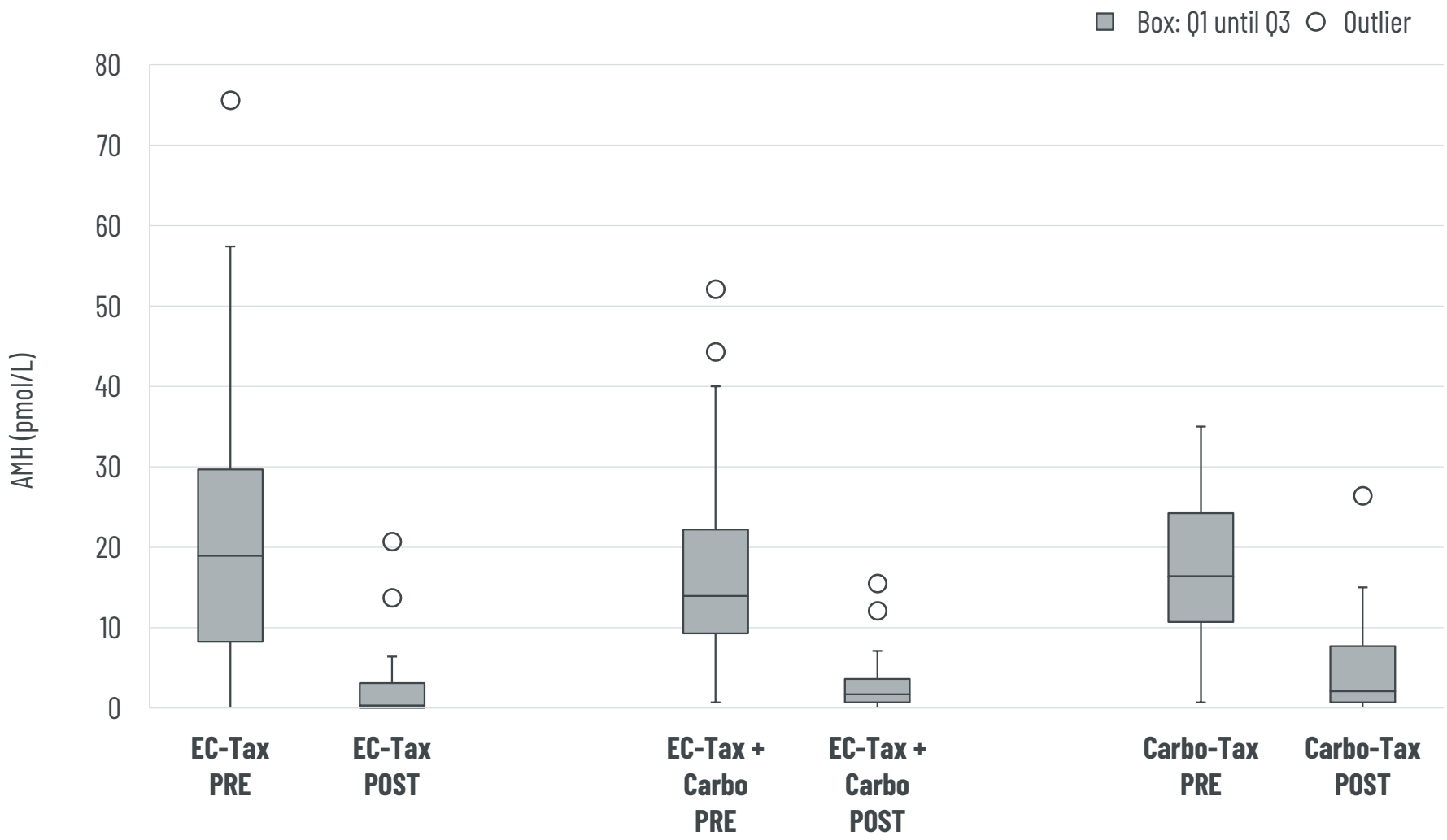
± Surgery (½ ovary), hormone therapy, immunotherapy, targeted therapy, and cell therapy



Breast cancer

Median and interquartile range (IQR), n = 98

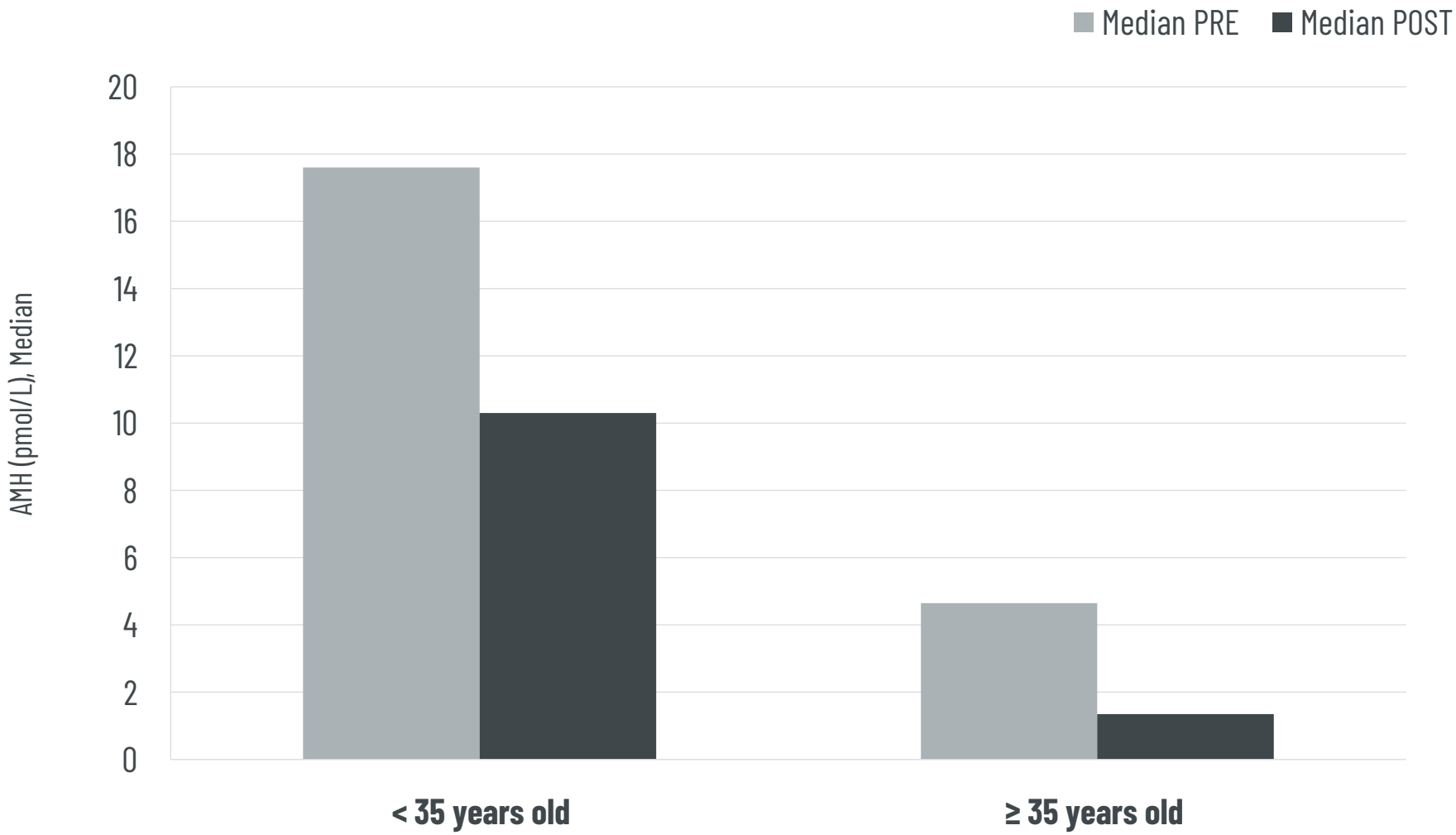
± Surgery (½ ovary), hormone therapy, immunotherapy, targeted therapy, and cell therapy



Hodgkin-Lymphoma

AMH by age group, n = 37

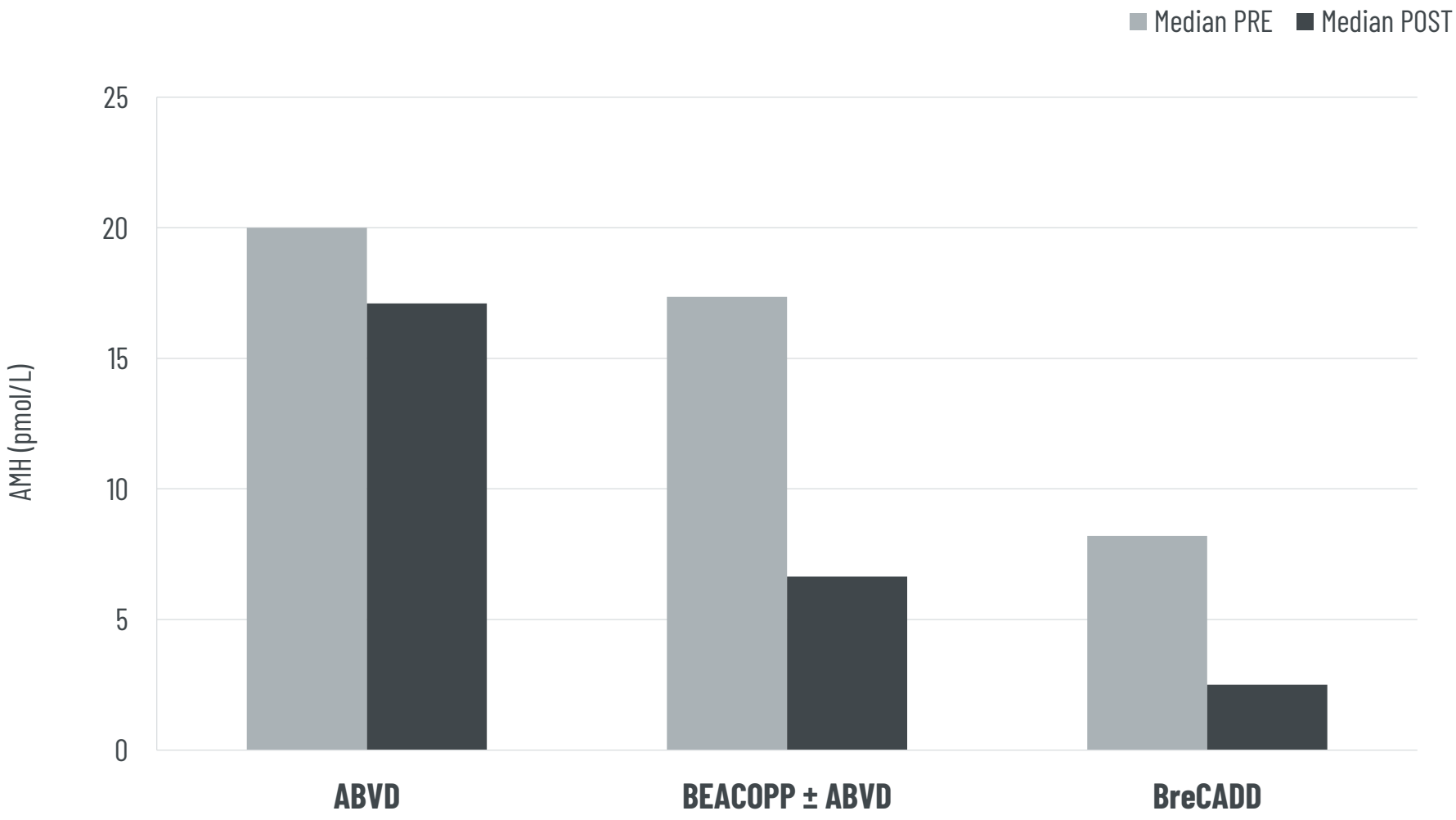
± Surgery (ovaries), hormone therapy, immunotherapy, targeted therapy, and cell therapy



Hodgkin-Lymphoma

AMH median before and after therapy, n = 37

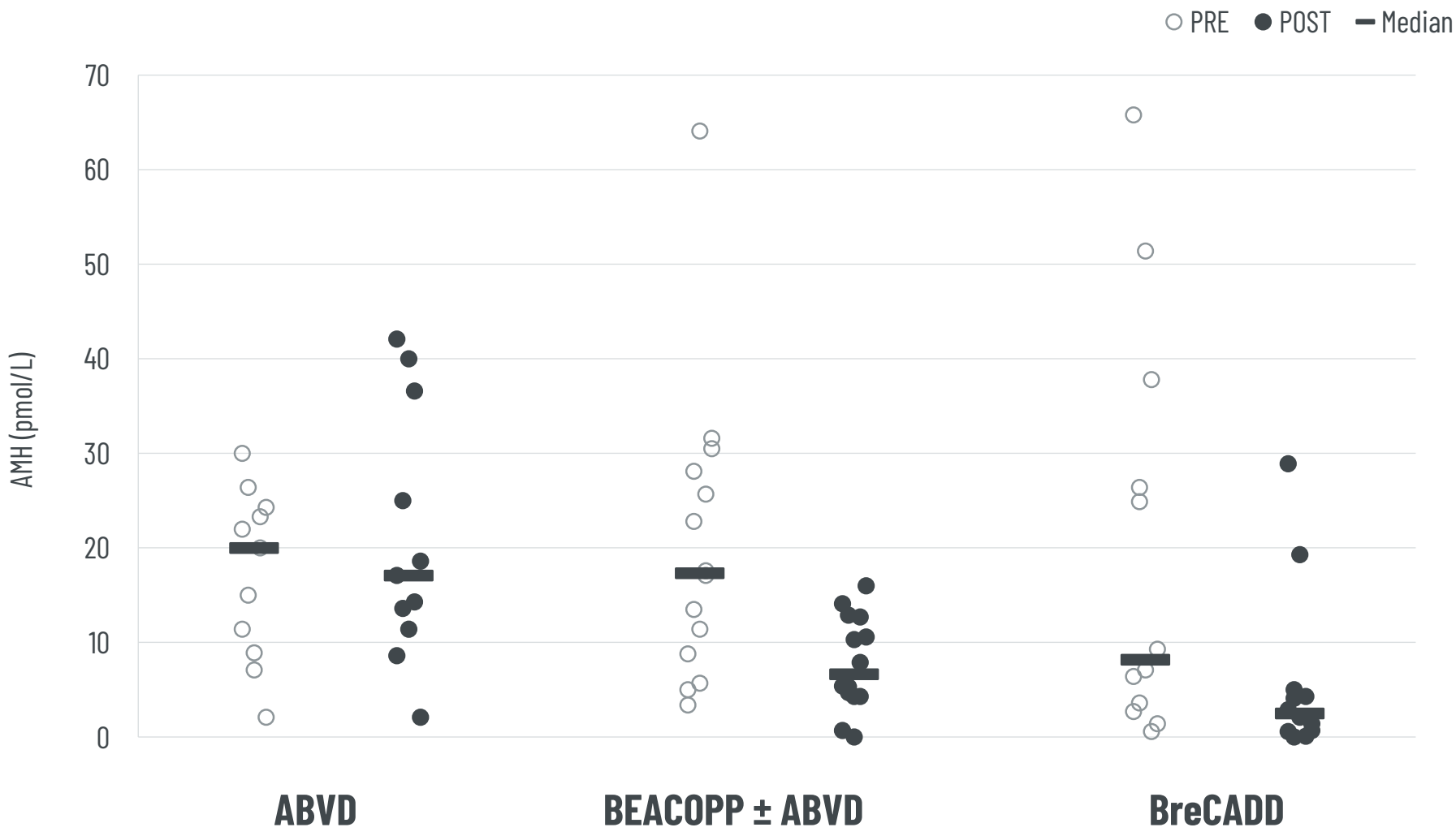
± Surgery (ovaries), hormone therapy, immunotherapy, targeted therapy, and cell therapy



Hodgkin-Lymphoma

Each patient, with medians, n = 37

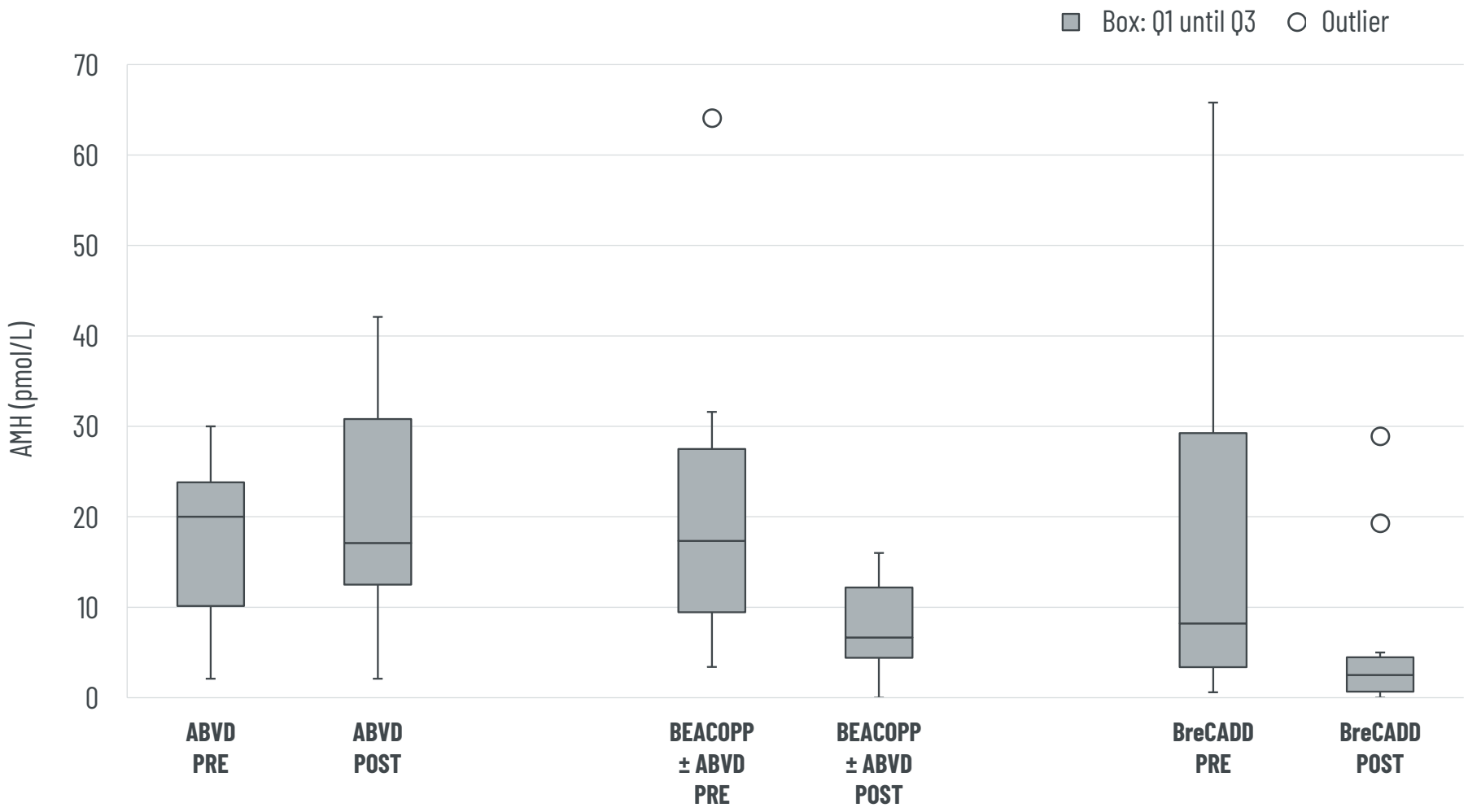
± Surgery (ovaries), hormone therapy, immunotherapy, targeted therapy, and cell therapy



Hodgkin-Lymphoma

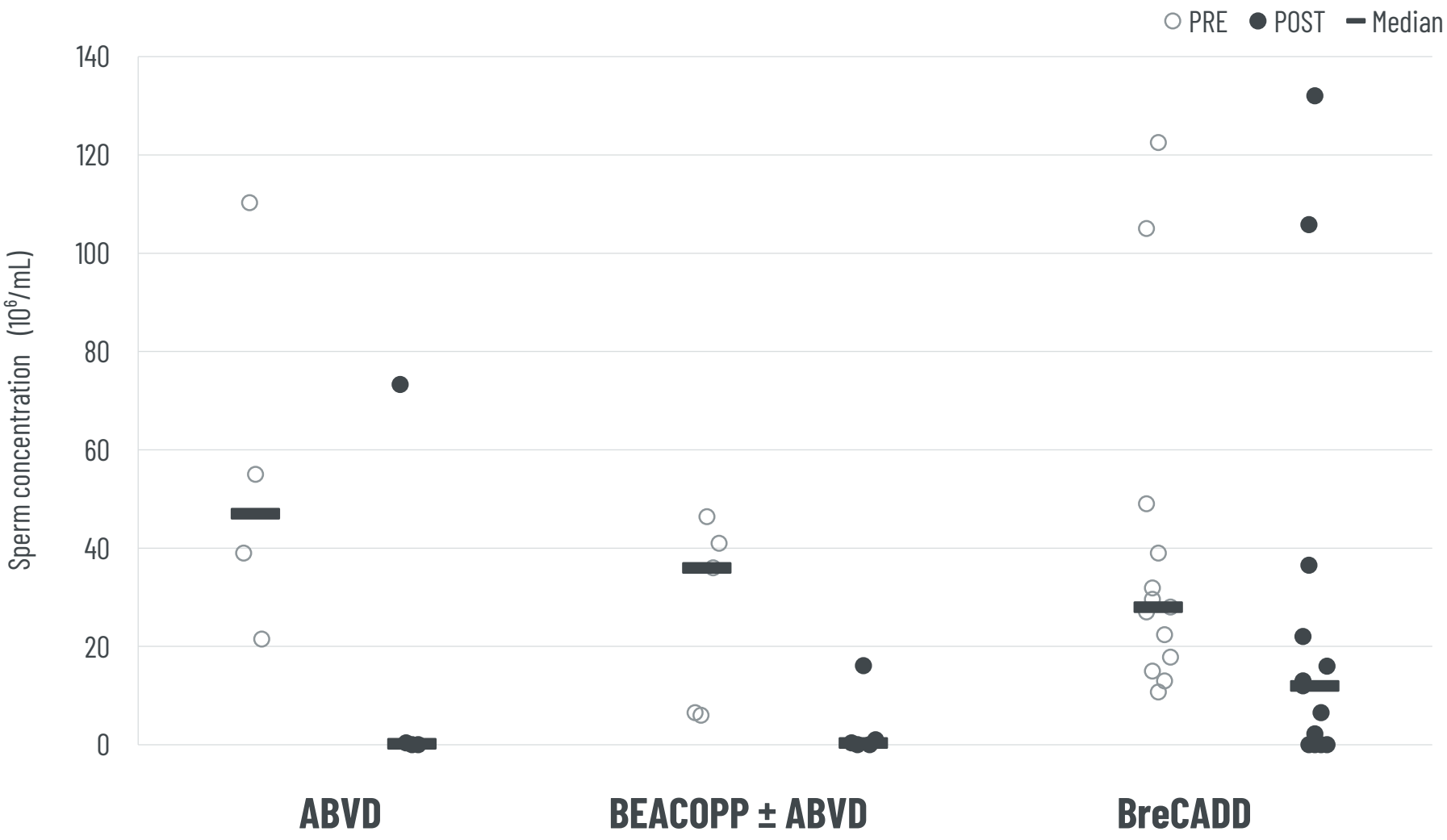
Median and interquartile range (IQR), n = 37

± Surgery (ovaries), hormone therapy, immunotherapy, targeted therapy, and cell therapy



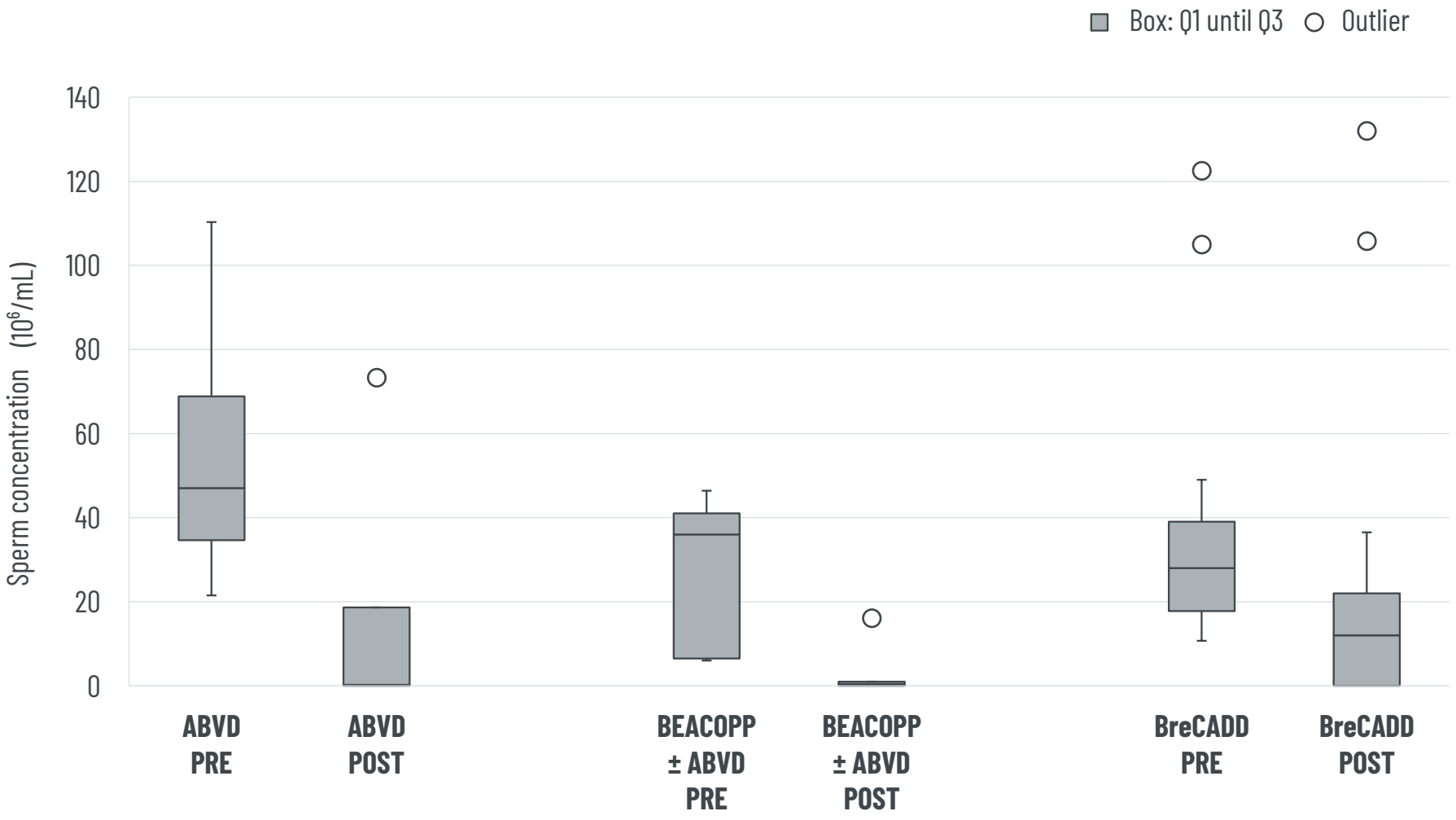
Hodgkin-Lymphoma

Each patient, with medians, n = 22



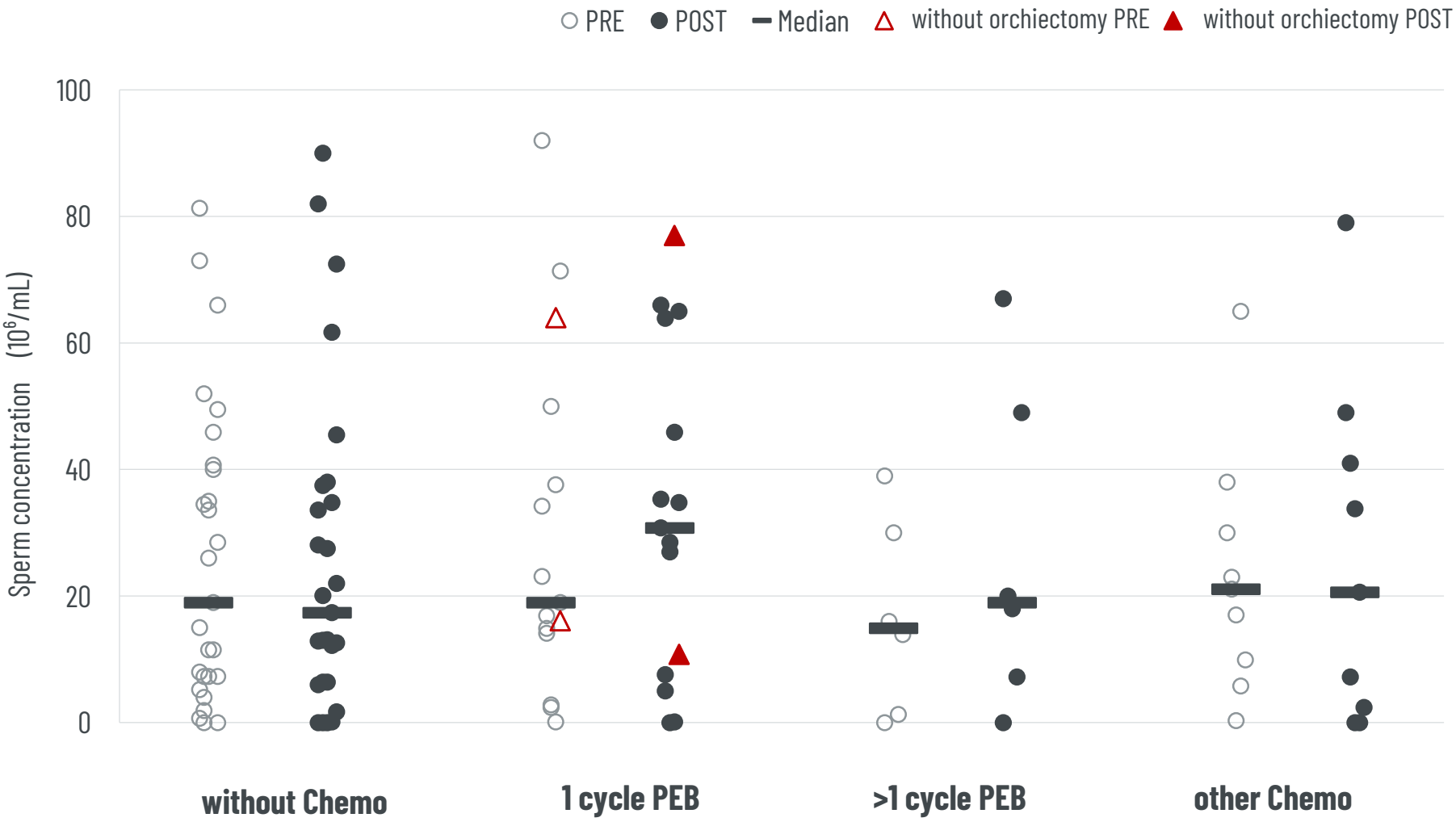
Hodgkin-Lymphoma

Median and interquartile range (IQR), n = 22



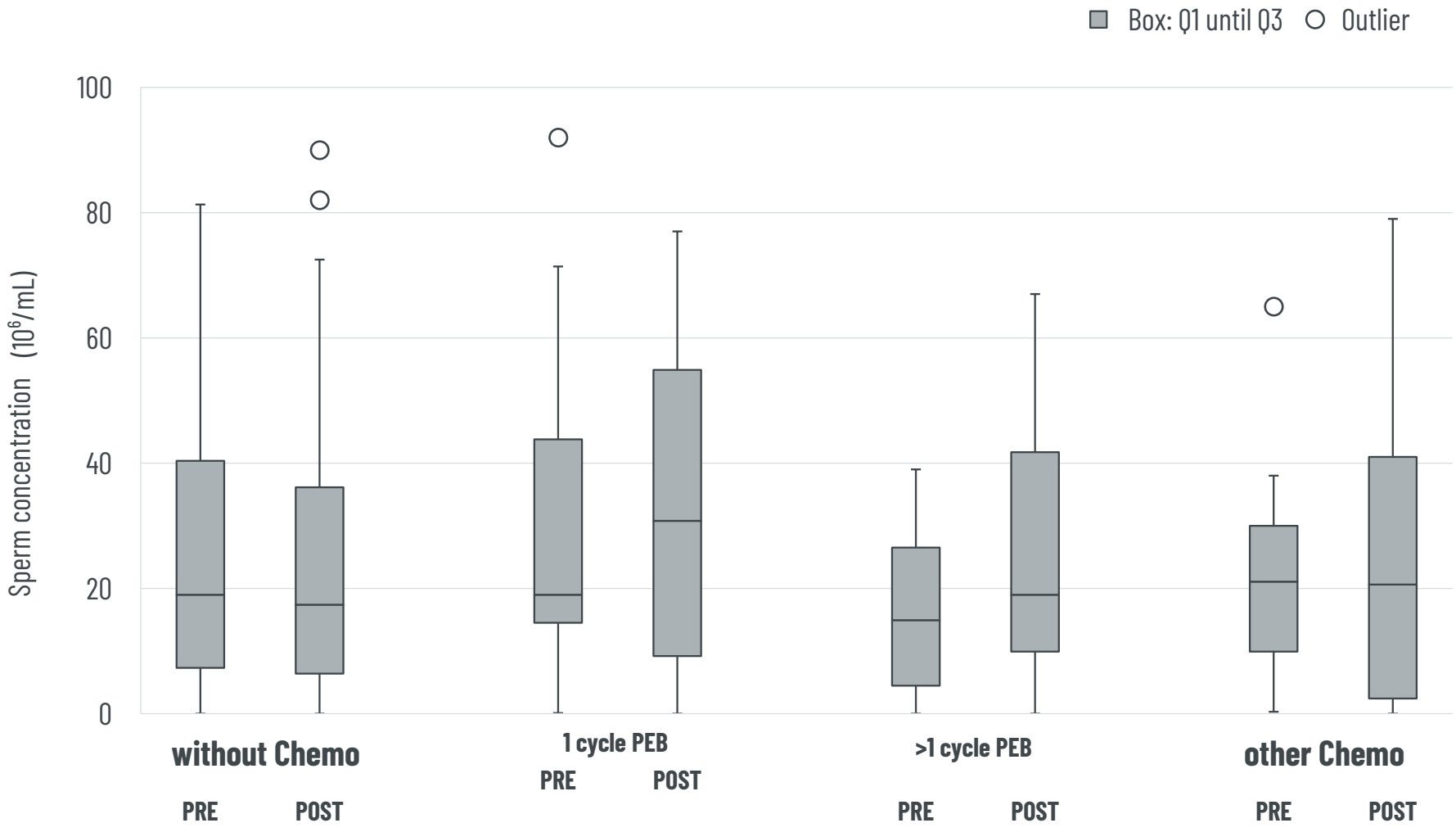
Testicular cancer

Each patient, with medians, n = 57



Testicular cancer

Median and interquartile range (IQR), n = 57



Possible abstract titles for ESHRE 2027

Gonadotoxicity

... provided we can further increase the number of follow-ups, and assuming that a statistical analysis confirms the manual analysis:

Breast cancer

The most common chemotherapies have a similar impact on **AMH concentrations** – analysis of the FertiTOX project of women, treated since 2024

Hodgkin lymphoma

The impact of the most common Hodgkin lymphoma chemotherapies including BreCADD on **AMH / sperm concentrations** – analysis of the FertiTOX project of women / men treated since 2024

Testicular cancer

Semi-orchiectomy and the most common chemotherapies have only a low effect on **sperm concentrations** – analysis of the FertiTOX project of men treated since 2024

Initial analyses provided by Ariane & Fukang (Heidelberg)

Potential Abstracts ESHRE 2027

Secondary Outcomes

FertiTOX
Fertility after gonadotoxic treatments

ESHRE-Abstracts 2027-2028?

1. Prognostic factors for undergoing fertility preservation procedures

Analysis of **fertility preservation** procedures (yes/no, type) per disease
Association of **age before** cancer therapy and fertility preservation procedures (yes/no, type) per disease
Association of **children before** chancer therapy and fertility preservation procedures (yes/no, type) per disease
Association of **partnership before** chancer therapy and fertility preservation procedures (yes/no, type) per disease
Association of **BMI before** chancer therapy and fertility preservation procedures (yes/no, type) per disease

2. Fertility preservation – Safety issues

Postponement of cancer therapy due to fertility preservation per disease
Complications due to fertility preservations

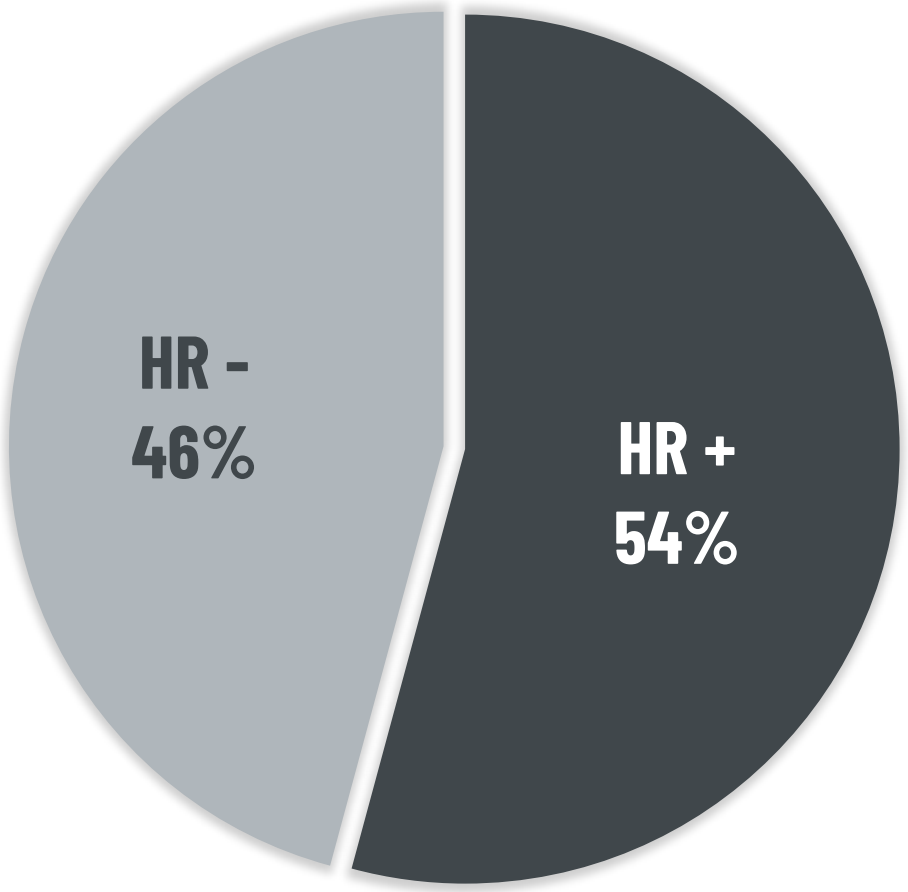
3. Fertility preservation – Efficacy issues

Nummer of oocytes per stimulation per disease and age
Sperm concentration per disease
Turn up rate for follow up consultation per disease
Death rate per disease

Breast cancer

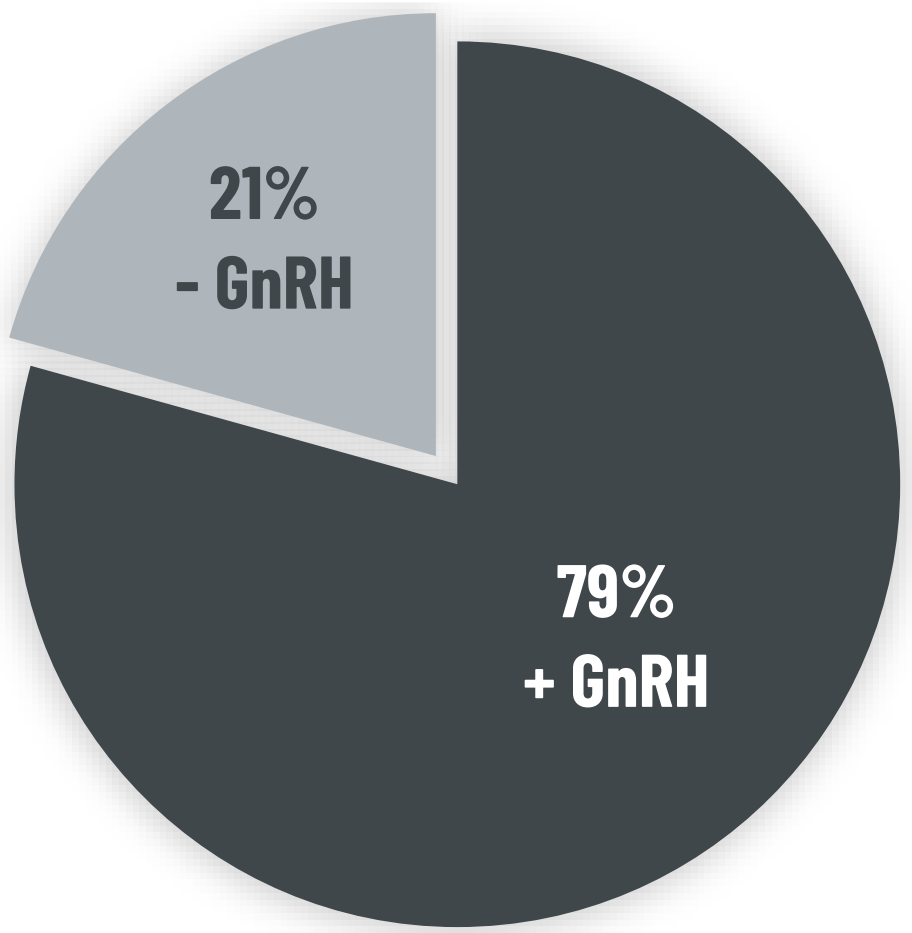
Total follow-up 107, of which 58 HR-positive, 49 HR-negative

Problem: numbers too low



HR-positive patients with follow-up

58 patients: 46 receiving GnRH treatment, 12 without GnRH at follow-up (26.08.2026)



Potential abstracts for ESHRE 2027

Further analyses

FertiTOX
Fertility after gonadotoxic treatments

1. Fertility preservation measures and their safety analysis

2. Cycle patterns and AMH during follow-up

3. Sperm analysis in testicular cancer & which conditions are associated with particularly poor sperm parameters?

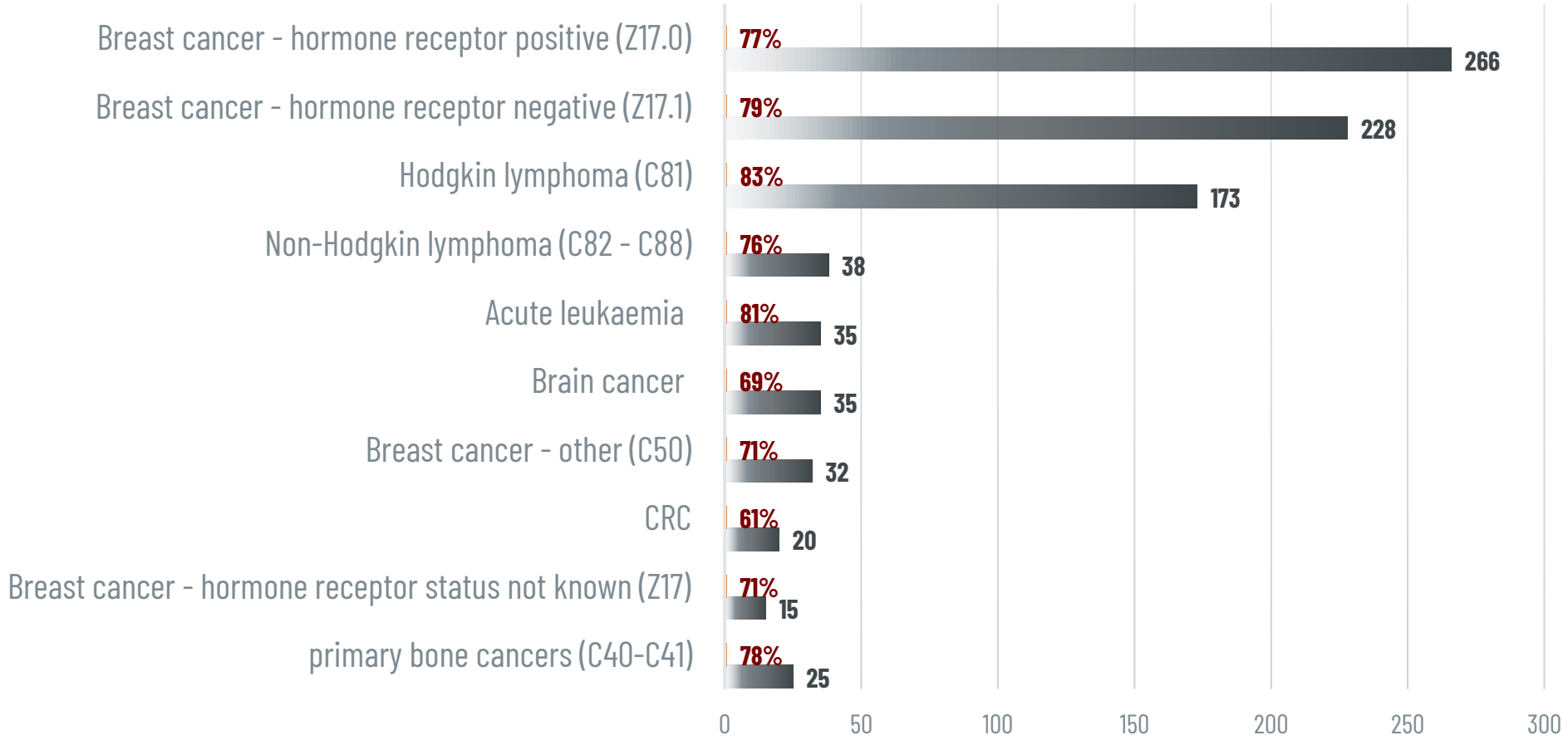
FertiTOX
Fertility after gonadotoxic treatments

1. Fertility preservation

safety analysis

Outcomes of GnRH

Number of cases and percentages



Safety Analysis

1.420 patients at initial presentation

- Number of patients with GnRH (995)
- Cryopreservation of oocytes, zygotes or embryos before gonadotoxic treatment (658)
- Cryopreservation of ovarian tissue before gonadotoxic treatment (213)

- **Complications ovarian tissue: 3.3%** (7/213)
  - 1x bleeding
  - 1x infection
  - 5x no information
- **Complications oocytes, zygotes or embryos: 4.3%** (28/658)
  - 3x Vaginal bleeding
  - 3x Intra-abdominal bleeding
  - 0x Injury to intestines
  - 0x Peritonitis
  - 0x Surgery required
  - **6x hospitalization: 1.4%**
  - 16x other: 1x pregnant prior to stimulation, 1x fever, 1x no response, 1x allergy to Gonadal-F, **9x OHSS** (including 1x puncture, 1x embryo transfer postponed < 7 days), 1x different centre, 1x pain, 1x premature ovulation.

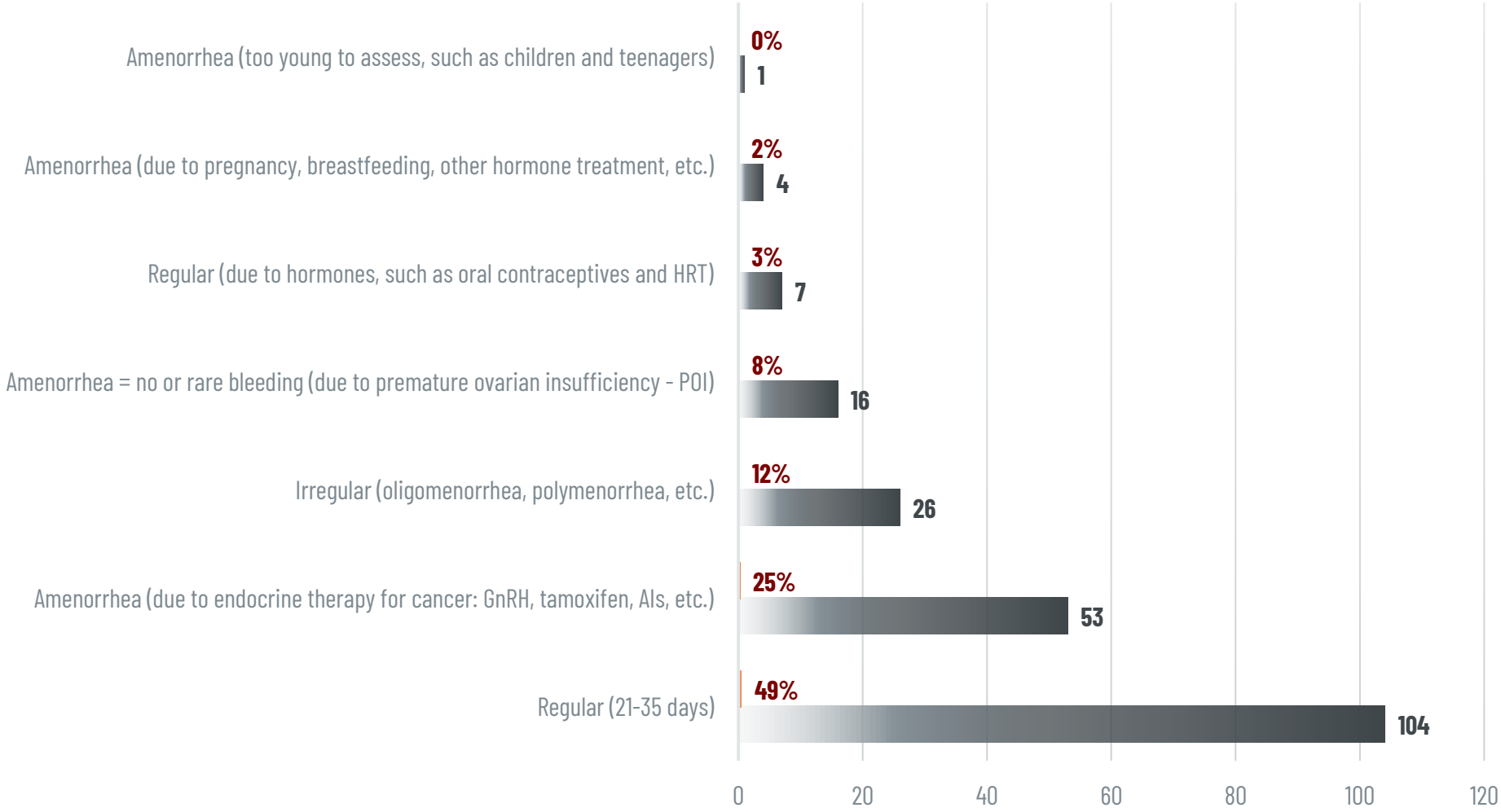
FertiTOX
Fertility after gonadotoxic treatments

2. Cycle patterns and AMH

during follow-up

Menstrual cycles

during the follow-up period



GnRH for fertility preservation

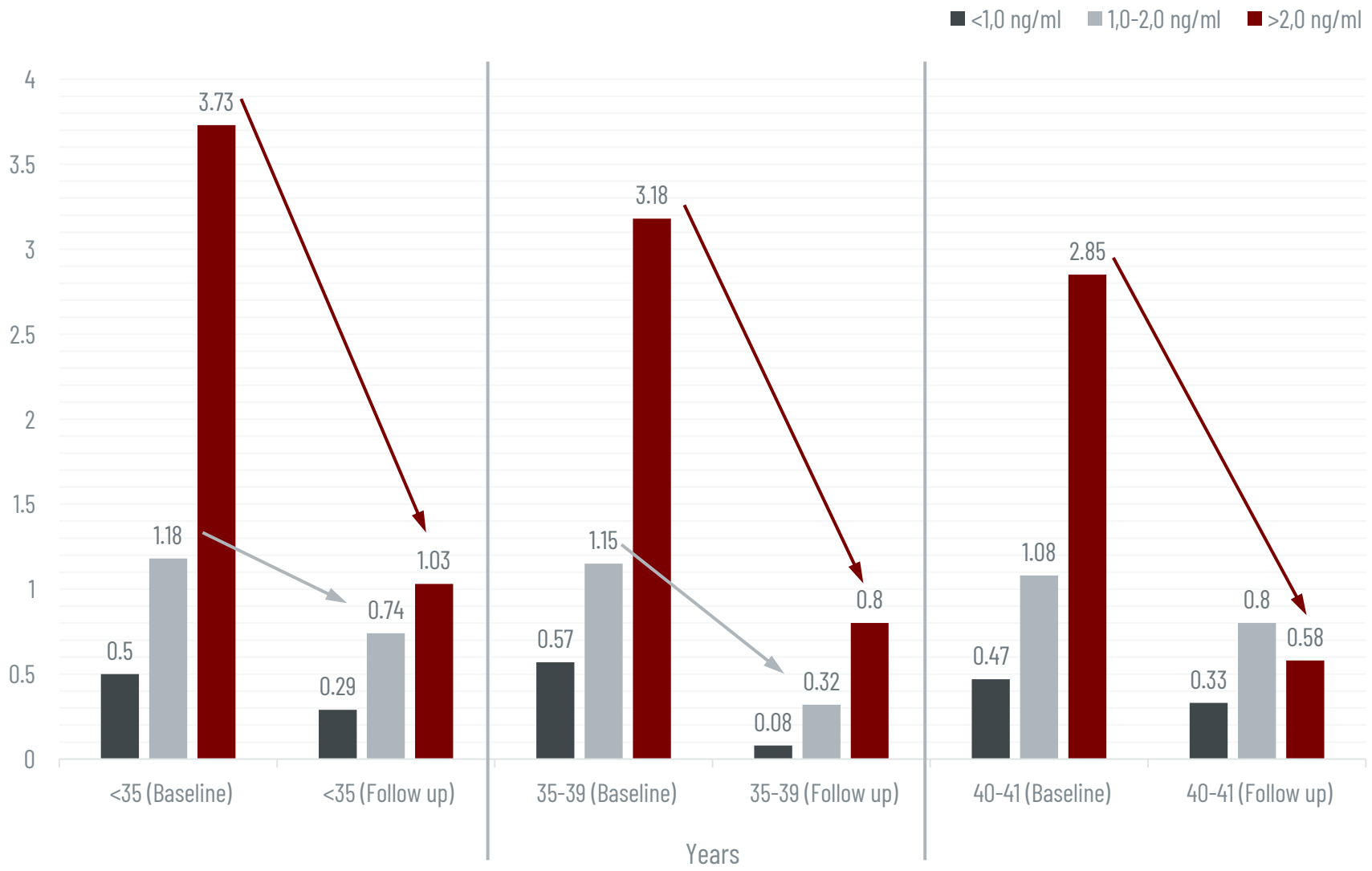
Follow-up AMH value, 196 patients

- Total GnRH 142 with follow-up
  - Additional oocyte cryopreservation: 49 patients
  - Additional ovarian tissue cryopreservation: 44 patients, all without complications
  - Additional oocyte plus ovarian tissue cryopreservation: 4 patients (3x breast cancer, 1x aplastic anaemia)
  - 49 patients: no additional fertility preservation
  - **AMH (n=142): Baseline mean: 2.24 ng/mL, SD: 1.83**
  - AMH (without GnRH, **n=105**), mean: 0.96 ng/mL, SD: 1.15
  - AMH (with GnRH at follow-up, **n=37**), mean: 0.16 ng/mL, SD: 0.27

- Of 85 USP cases (all USP with follow-up): 4 complications (1x fever 24h later with chemotherapy delayed, 1x OHSS, 1x premature ovulation, 1x vaginal bleeding); of these, 49 involved additional GnRH.

Changes in AMH by age

during the 12-15 months follow-up period

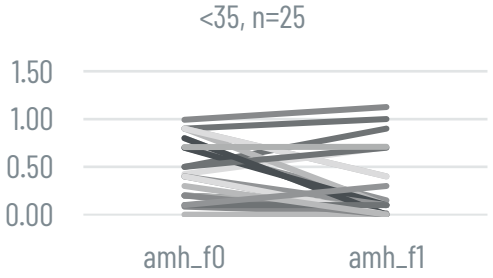


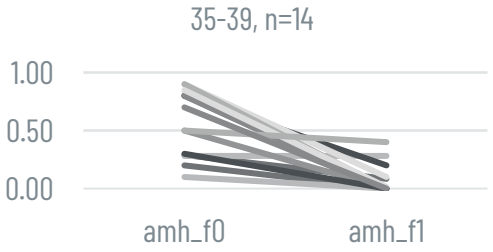
Changes in AMH by age

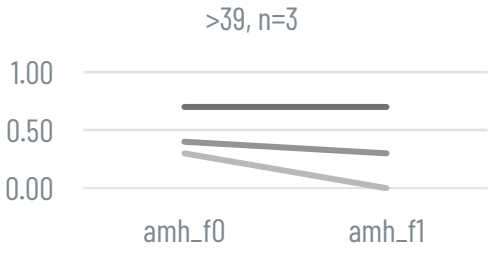
during the 12-15 months follow-up period

FertiTOX
Fertility after gonadotoxic treatments

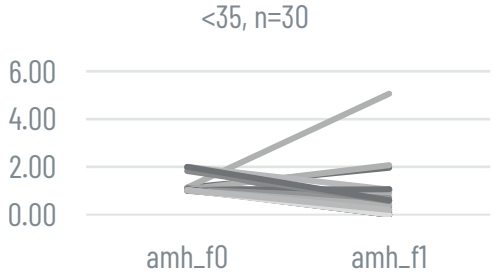
AMH $_{baseline}$ < 1 ng/mL

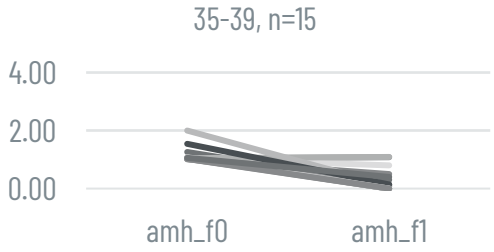


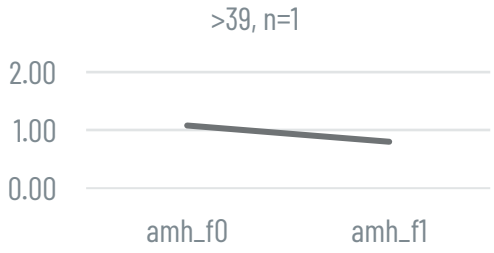




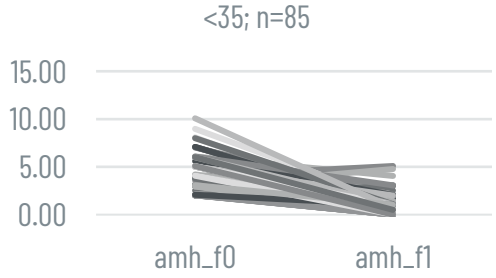
AMH $_{baseline}$ 1-2 ng/mL

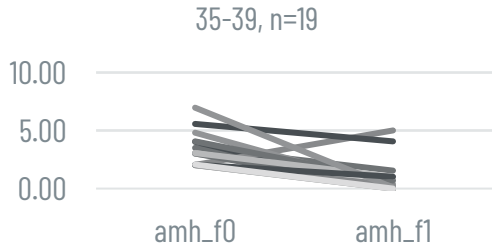


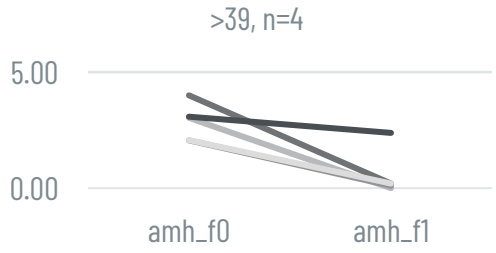




AMH $_{baseline}$ >2 ng/mL





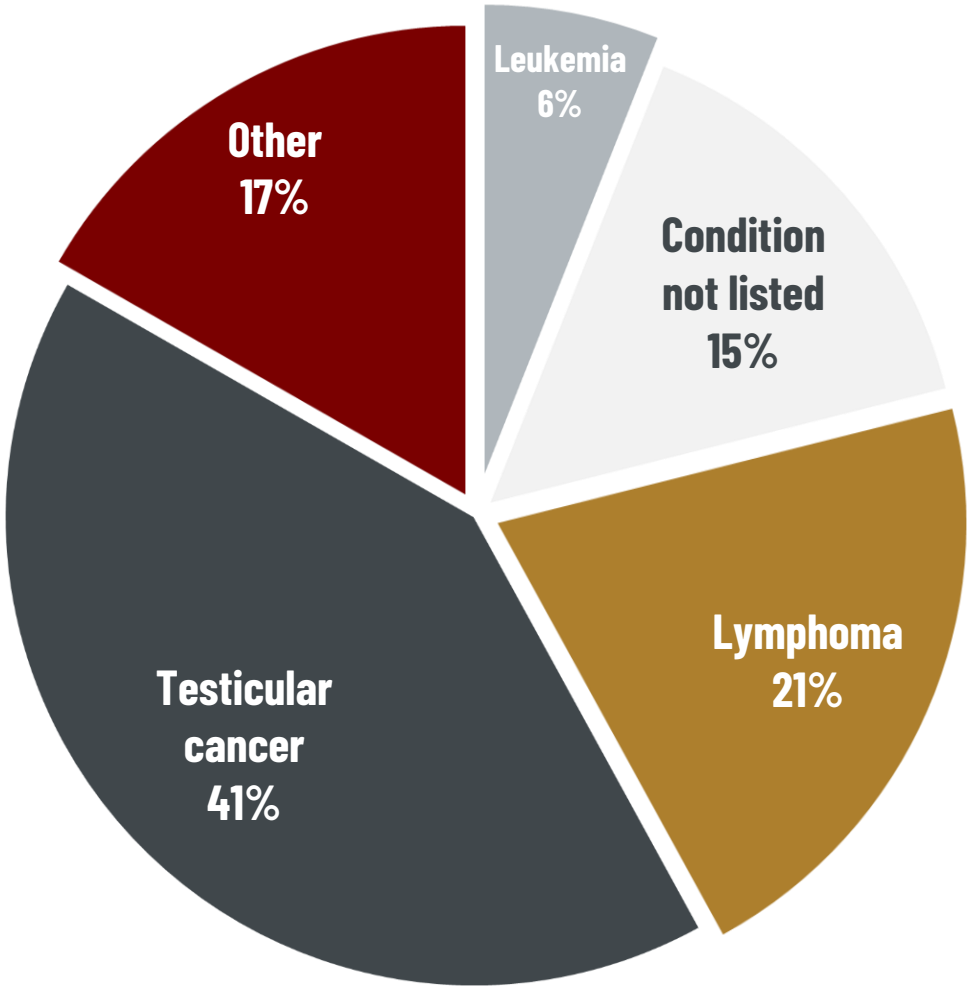


3. Testicular cancer

conditions associated with poor semen parameters

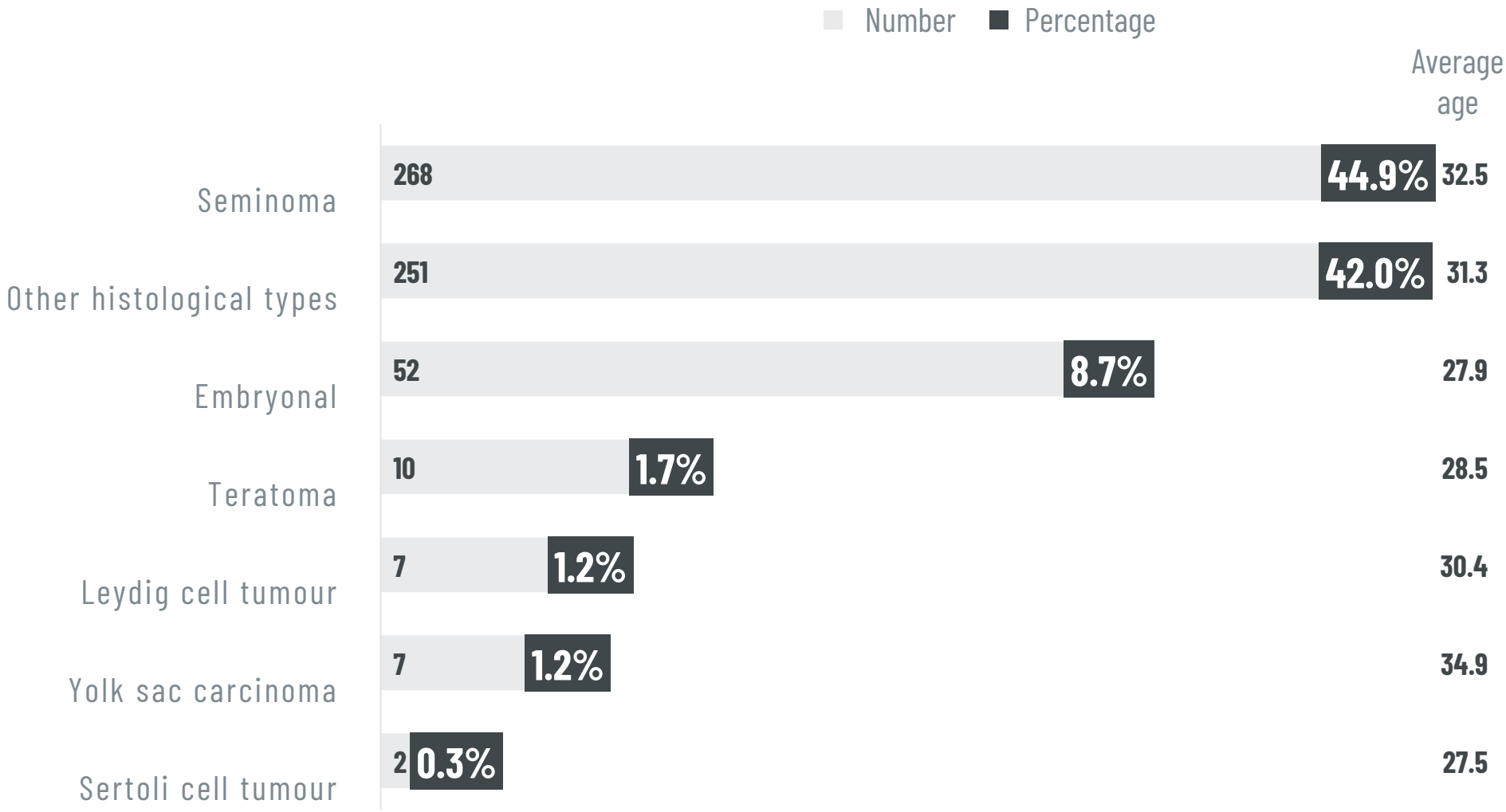
Overall disease

1.559 patients at initial presentation



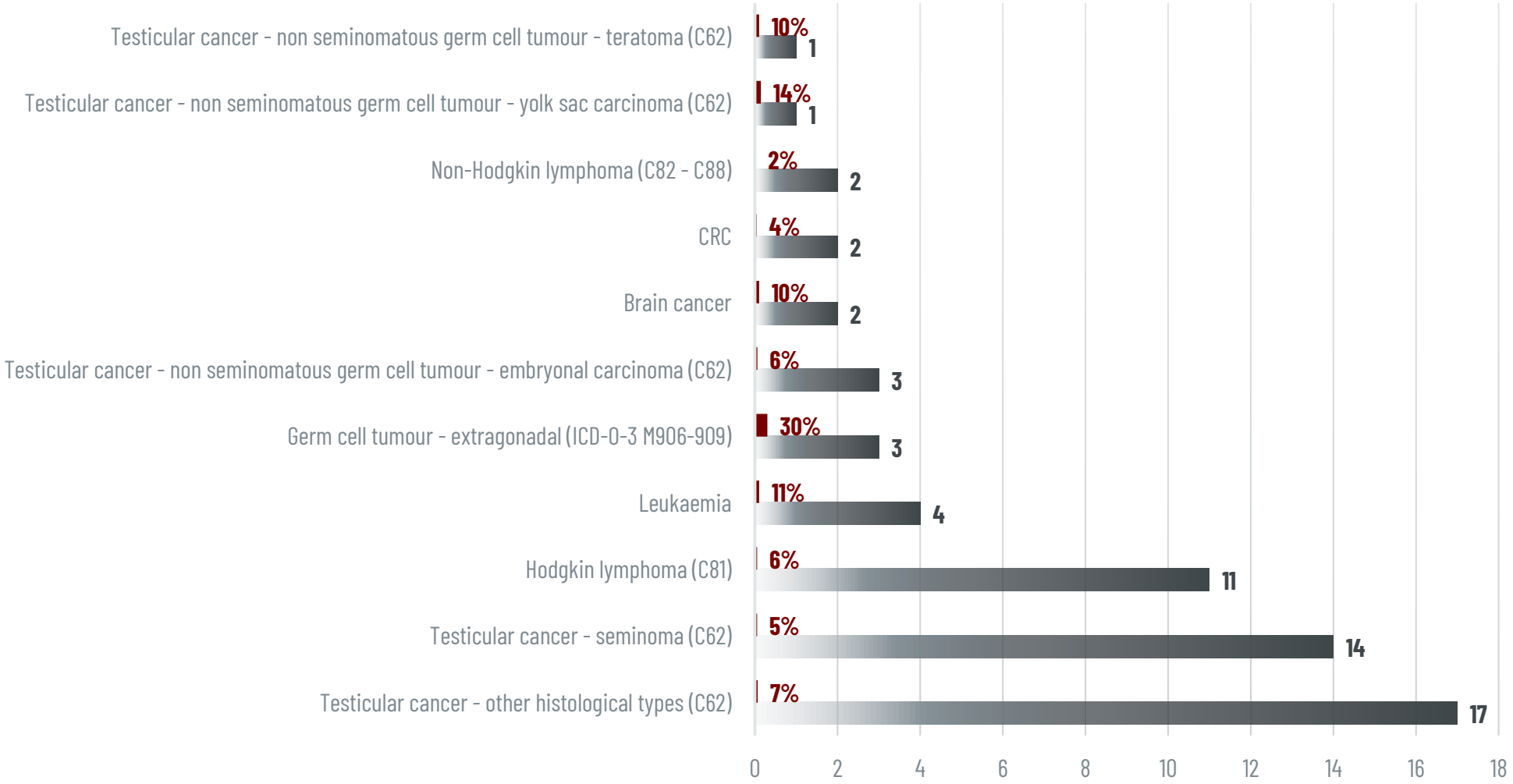
Testicular cancer

number of cases by type, proportion, and mean patient age



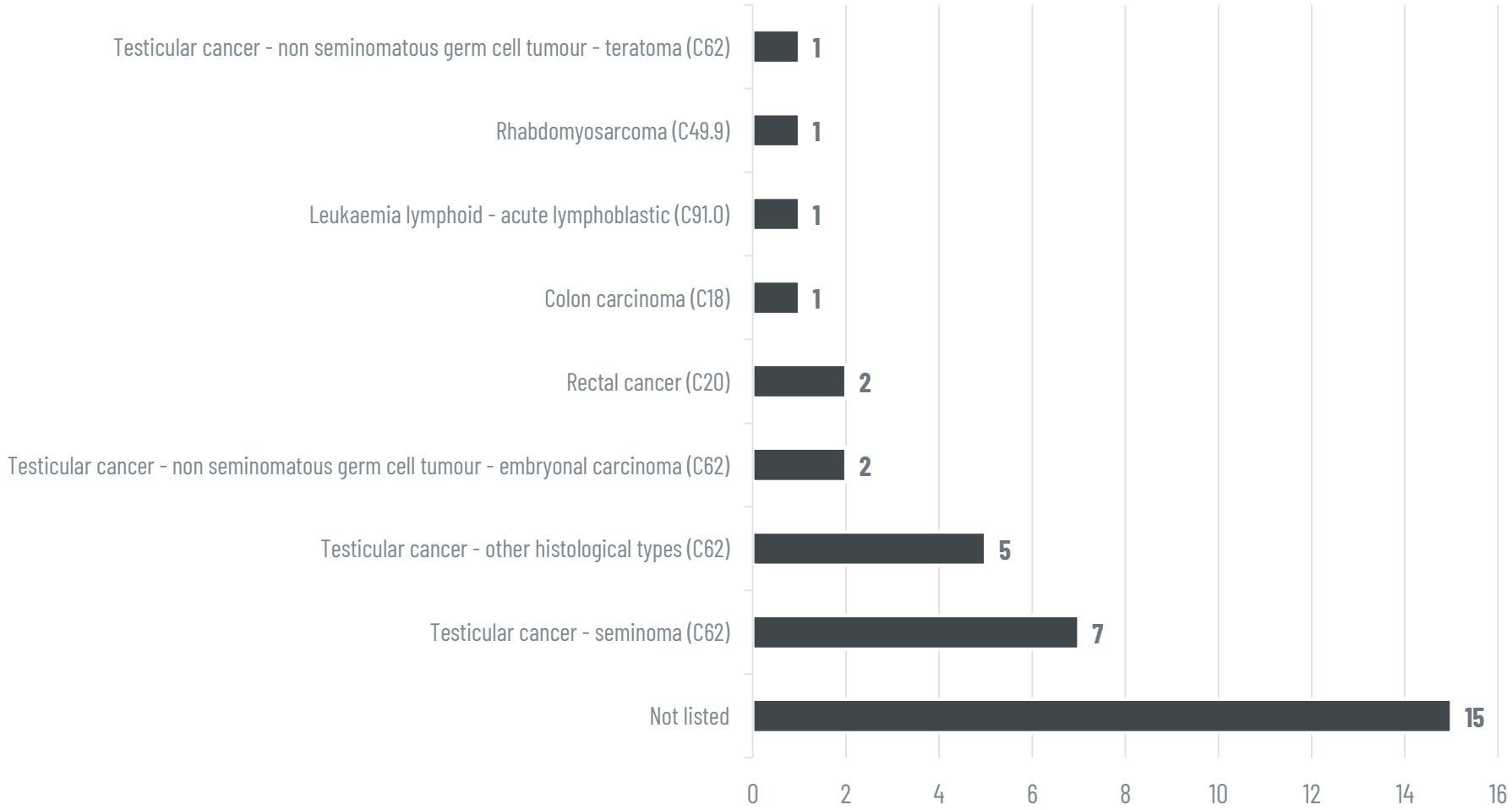
Distribution of conditions

Sperm concentration < 10^6/mL



Cryopreservation of testicular tissue

Overall diseases, age ≥ 16 years old



FertiTOX
Fertility after gonadotoxic treatments

Analysis schedule for ESHRE 2027

Timeline 2026

Further timeline for data analysis leading up to the ESHRE deadline

Data cleaning	January - June
Brainstorming what could be analysed	May
Main Assembly	15 & 24 June
Extended Steering Committee Meeting	26 August (16:00 – 18:00)
Meeting D-A: Frankfurt Airport	15 September (11:00 – 16:00)
Meeting CH: online	24 September
Data analysis REDCap (D-A-CH)	**August - October**
Steering Committee Meeting	02 December (16:00 – 17:00)
Statistical analysis	**November - December**
Abstract preparation für ESHRE	**January 2027**

PredictAYA retrospective

Transfer of FertiTOX to PredictAYA

- The transfer of information to studies approved by an ethics committee may take place within the framework of inclusion in FertiTOX

Michael has just to add the information to the Ethics and has to provide a data transfer agreement. No action required from the other centers.

PredictAYA prospective

PredictAYA

Funded by the European Union

UNIVERSITÄTS KLINIKUM HEIDELBERG

Funded by the European Union

PREDICT AYA

Prediction and prevention of late effects in AYA cancer survivors

An effort to understand, predict and prevent late effects in AYAs 15-39 years of age, with a focus on fertility and gonadal toxicity

PredictAYA – join?

Switzerland



Varia

Interested in participating in the analysis?

Please announce this proactively

- What do you suggest regarding the handling of authorship?
- Note: Limits on authorship for ESHRE and other publications must be taken into account.

Next meetings

via Zoom

General Assembly (Deutschland & Österreich)

☐ **14. Januar 2027**, Donnerstag 18:00 – 19:00

☐ **26. Januar 2027**, Dienstag 16:00 – 17:00

General Assembly (Switzerland)

☐ **14 January 2027**, Thursday 16:00 – 17:00

☐ **26 January 2027**, Tuesday 18:00 – 19:00

Sponsors

FertiTOX
Fertility after gonadotoxic treatments

