

COST Action CA22125 Precision-BTC Network

Gender Equality Plan

1. Background

Biliary tract cancers (BTCs) show clear sex differences in incidence ¹. Men are more frequently affected by intrahepatic cholangiocarcinoma ², while women have higher rates of gallbladder cancer ³. Recognizing these disparities, the Precision-BTC Network is committed to ensuring gender/sex equality both in the scientific design of research and in the management and governance of the Action. This Gender Equality Plan (GEP) outlines the principles, measures, and monitoring mechanisms that will guide this commitment throughout the lifetime of the Action.

2. Objectives

The GEP of the Precision-BTC Network aims to:

- Ensure that sex and gender are appropriately integrated into the scientific content and methodology of the Action.
- Promote balanced participation and leadership of women and men in all structures and activities of the Action.
- Foster an inclusive, respectful environment that prevents discrimination, bias, and harassment.
- Monitor and transparently report progress on gender equality within the Action and adjust measures when needed.

3. Gender and sex equality in scientific research

3.1. Sex-stratified analyses

- All studies and registries developed within the Precision-BTC Network will be encouraged to collect, analyse, and report data disaggregated by sex, whenever scientifically relevant and feasible.
- Sex-stratified analyses will be used to identify sex/gender-specific risk factors, outcomes, and therapeutic responses.

3.2. Hormonal and reproductive factors

- Data collected in clinical studies and registries will include, whenever appropriate and possible, information on hormone use (contraceptives, hormone replacement therapy) and reproductive history (e.g. parity, age at first pregnancy, cholecystectomy), given their relevance for gallbladder cancer risk ^{4,5} and that of BTCs in general.
- These variables will be considered in statistical analyses to better understand sex-/gender-specific determinants of BTCs.

¹ Rimassa L, Khan S, Groot Koerkamp B, Roessler S, Andersen JB, Raggi C, Lleo A, Nault JC, Calderaro J, Gabbi C, et al. Mapping the landscape of biliary tract cancer in Europe: challenges and controversies. Lancet Reg Health Eur. 2025 Feb 19:50:101171

² Ellington TD, Momin B, Wilson RJ, Henley SJ, Wu M, Ryerson AB. Incidence and mortality of cancers of the biliary tract, gallbladder, and liver by sex, age, Race/Ethnicity, and stage at diagnosis: United States, 2013 to 2017. Cancer Epidemiol Biomarkers Prev. 2021;30(9):1607–1614.

³ Lazcano-Ponce EC, Miquel JF, Munoz N, et al. Epidemiology and molecular pathology of gallbladder cancer. CA Cancer J Clin. 2001;51(6):349–364.

⁴ Jackson SS, Pfeiffer RM, Gabbi C, Anderson L, Gadalla SM, Koshiol J. Menopausal hormone therapy and risk of biliary tract cancers. Hepatology. 2021 Nov 11.

 $^{^{5}}$ Gabbi C, Kim HJ, Barros R, Korach-Andrè, Warner M, Gustafsson JÅ. Estrogen-dependent gallbladder carcinogenesis in LXRβ female mice. Proc Natl Acad Sci U S A 2010 Aug 17;107(33):14763-8



3.3. Balanced recruitment of participants

- Clinical and translational studies linked to the Action will aim for proportional recruitment of male and female participants, reflecting disease epidemiology and ensuring sufficient statistical power for sex-specific analyses.
- Deviations from balanced recruitment (e.g. due to disease patterns or feasibility constraints) will be documented and discussed in study protocols and reports.

3.4. Standards for reporting (SAGER Guidelines)

- Reporting of scientific results in meetings, conferences, and publications will follow, as far as possible, the Sex and Gender Equity in Research (SAGER) Guidelines and relevant policies from journals (e.g. The Lancet group)⁶ to ensure that sex and gender considerations are explicitly addressed in design, analysis and interpretation.
- Authors involved in joint publications of the Precision-BTC Network will be reminded to:
 - i. clearly state whether sex/gender were considered in the design.
 - ii. report sex-disaggregated results where relevant.
 - iii. discuss sex/gender implications for patients and healthcare.

4. Gender equality in management of the Action

4.1. Leadership balance

- Each Working Group (WG) will have both male and female co-leaders, wherever possible.
- When leadership positions become vacant, efforts will be made to identify and encourage qualified candidates of underrepresented gender(s).

4.2. Equal representation in activities

- Conferences, workshops, training schools and other Action events will ensure balanced gender representation among speakers, moderators, trainers, panelists and participants.
- When preparing programmes, organisers will actively search for and invite qualified women and men, including early-career researchers, to avoid "manels" and ensure visibility for diverse role models.

4.3. Visibility and recognition of female scientists

- Female scientists will be actively encouraged to take leading roles in keynote and plenary lectures, session chairing and panel discussions, and coordination of joint publications and grant applications.
- Success stories of women in the Action (e.g. leadership roles, awards, promotions) may be highlighted on the Action's communication channels, in agreement with the individuals concerned.

5. Inclusive environment, work-life balance and prevention of harassment

The Precision-BTC Network is committed to an inclusive and respectful working culture, aligned with COST rules and national regulations.

 Meetings and events will be planned, as far as feasible, considering work-life balance (e.g. avoiding very late sessions, considering school holidays when possible, enabling hybrid/online participation to reduce travel load).

⁶ https://ese.arphahub.com/article/86910/



 Any form of discrimination, harassment, or gender-based violence is not tolerated. Participants will be reminded of relevant institutional and COST-level procedures for reporting and addressing misconduct.

6. Recruitment, participation and career development

- The Action will strive for gender-balanced participation in management committee (MC) members and substitutes, working group members, Short-Term Scientific Missions (STSMs) and other mobility schemes, training schools, workshops, and conference grants.
- Young researchers and innovators (YRIs) of all genders will be especially encouraged to participate
 and take positions of responsibility (e.g. as task leaders or co-leaders), to support equitable career
 development.
- Calls for participation (e.g. for STSMs, training schools, or specific tasks) will use gender-neutral, inclusive language, and be widely disseminated across networks to reach diverse candidates.

7. Monitoring and reporting

7.1. What will be monitored?

On an annual basis, the Action will collect and review sex-/gender-disaggregated data on:

- Composition of governance and leadership: MC members and substitutes, WG leaders and coleaders, task leaders.
- Participation in activities: speakers, moderators, and panelists in events; participants in workshops, training schools and meetings; applicants and beneficiaries of STSMs, ITC Conference Grants, and other mobility/training instruments.
- Scientific outputs: gender distribution of first/last authors in joint publications, inclusion of sex/gender analyses in scientific outputs where relevant.

7.2 Monitoring process

The Gender and Equality Coordinators will supervise data collection and prepare a brief annual monitoring note summarising current gender balance across roles and activities, progress compared with previous years and any identified gaps or imbalances. The results will be discussed in the Management Committee and, where appropriate, with WG leaders to agree on follow-up actions.

7.3 Corrective and improvement measures

If significant imbalances or barriers are identified, the Action may, for example:

- Prioritise members of underrepresented gender(s) for certain roles when qualifications are comparable.
- Actively reach out to potential candidates of underrepresented gender(s) for leadership and speaker roles.
- Adapt communication and dissemination strategies to reach more diverse audiences.
- Adjust event formats (e.g. hybrid options) to reduce practical barriers to participation.

7.4 Reporting to COST

- Relevant information and indicators will be included in mandatory COST reporting (e.g. annual and final reports) under sections related to inclusiveness, participation statistics and impacts.
- The monitoring results will be used to demonstrate progress and to inform any additional measures needed in line with COST expectations on inclusiveness and gender balance.



Commitment

The Precision-BTC Network affirms that **gender and sex equality is both a scientific requirement and an ethical imperative**. By integrating sex-/gender-specific considerations into research design and analysis, ensuring balanced representation in leadership in the Action, and continuously monitoring and improving gender equality practices, the Precision-BTC Network aims to deliver more robust, inclusive, and impactful outcomes for patients with biliary tract cancers and for the scientific and clinical communities working in this field.