### **Gender Equality Plan**

# German Society of Pediatric Oncology and Hematology gGmbH

## AML-BFM Study Group

Traditionally, the percentage of women working in the field of pediatrics, in particular pediatric hematology/oncology is quite high. Nevertheless, the high percentages of women working in this field, either as pediatrician, researchers or as project management is not yet equally represented in the strategic-making positions (head of the labs, professorships).

Within the AML-BFM Study Group, founded by Prof. Ursula Creutzig and Prof. Günther Schellong (1978), leading and responsible positions were traditionally also covered by women.

The total percentage of women in different member groups are given here:

Study/Steering committee	54%	(f 13/ m 11)
Researchers (senior)	50%	(f 5/ m 5)
Clinician Scientists	75%	(f 3 / m 1)
PhD-Doctorate (M.sc.)	86%	(f 6 / m 1)
MD-Doctorate	78%	(f 11 / m 3)
Project manager	80%	(f 4 / m 1)
Documentation	70%	(f 5 / m 2)
Technicians	100%	(f 7 / m 0)

Although the majority of positions is hold by women (~80%), this is not equally given in the senior research positions or the Steering Committee (only ~50%). This indeed still reflects the general situation in academia, i.e. that in the past much more men than women achieved full professorships.

The BFM Group is actively supporting the improvement of conditions for female researchers, clinician scientist, PHD- and MD Students. All scientists are support to participate in particular programs such as "MediMent", a specific mentoring program at the University Essen by experienced (female researchers) to support young post doctorate researchers and clinician scientists on the way to a professorship or the "University Medicine Essen Clinician Scientist Academy" (UMEA) program.

Already now, all but one lab group leaders are women. The project team for conducting clinical trials is led by women including all positions of project managers.

Within the clinical trials conducted by the AML-BFM / GPOH gGmbH specific focus is given to gender aspects in terms of outcome, site effects but also fertility. This includes Within the GPOH specialised pediatricians and gynecologists are responsible for the ongoing research, recommendations and guidelines for fertility preservation for both girls and boys.

- Hormonal disturbances after chemotherapy: Information will be provided in order to increase awareness and improve therapeutic interventions.
- Leukemia in pregnancy: Although a rare condition all over Europe certainly a small number of girl develop leukemia in pregnancy. Experience with different types of leukemia, treatment schedules, time of pregnancy and outcome will be combined with general information on this issue.

#### Participation of Women in the Projects.

One third of the Projects (6 out of 18) have a female lead participant. Women are also represented as participants in all Projects. Project 2 predominantly involves female participants. If additional staff for the project is required, the following procedure is used at universities in Germany and is suggested for use in other European countries. Advertisements for all new employees contain the following passage: "Females are explicitly encouraged to apply for this employment. In case of equal qualification, females are preferentially employed". This procedure has been proven successful in the past. In advertisements women who return to professional life after children education will be explicitly encouraged for application. Furthermore, for all new jobs within the project the possibility of part time employment and flexible working hours will be offered. This is highly compatible with the necessary work. Also online work from home could be considered in special cases.

#### Gender Research Focus

In Pediatrics the relevance of gender is mostly relevant in inborn diseases or predisposition syndromes. About 7 to 10% of the hematological malignancies are associated to germ-lime aberrations. Therefore, these factors are in the focus of our research. Whereas in childhood AML and ALL (<10 years), the incidences within males and females are nearly equal, there is male preponderance up to 3:1 in adolescence. A variety of potential factors have been sporadically reported and could be associated with gender specific differences and incidences of all leukemias, infectious agents, hormonal influences, genes on Y or X chromosomes, chromosomal aberrations (female predominanceof trisomy 8) HLA system (e.g., gender differential disparities of minor histocompatibility antigens), psychosocial factors (e.g., coping techniques), pharmacokinetics of cytostatic drugs, availability ofstem cell donors. Most of these questions are not addressed in clinical studies and none has been demonstrated to be relevant so far. Therefore, an important goal of the BFM will be

to combine information on gender specific differences and to consider these issues for specific risk projects.

#### Outcome

In childhood leukemia, boys have a poorer outcome than girls. Reasons for that difference are in part the poorer outcome of boys with testicular involvement, the higher testicular relapse rate but also the higher rate of bone marrow relapses. This may be translated to gender specific treatment approaches such as prolonged maintenance therapy in males, intensified use particular drugs etc. It is so far unknown whether there is a difference in the cure rates with respect to gender for adolescents (a very important age group).

#### Long-Term Sequelae

The long-term effects are already in the focus of specific programs in childhood malignancies. This concerns entity specific but also general long-term sequelae. By nature, the kind of side effects differs between women and men.

GPOH gGmbH AML-BFM Study Group CEO and Chair 24.01.2023

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