AGMT_MBC REGISTRY

Metastatic breast cancer in Austria

NIS Number: NIS004886

Coordinating Investigator: R. Greil / Protocol Contact: S. P. Gampenrieder and G. Rinnerthaler
Department of Internal Medicine III, Laboratory for Immunological and Molecular Cancer Research, Paracelsus Medical University Salzburg,
Salzburg Cancer Research Institute and Cancer Cluster Salzburg, Austria

Protocol Synopsis

Indication: Metastatic breast cancer

Planned sample size: 1500 - 3000

Design: Retrospective and prospective, observational, multicenter research initiative

Recruitment: First patient in (FPI): Q2 2015

Primary Endpoints: Epidemiology, Therapies, Response, Survival, Predictive factors

Inclusion Criteria:
- Histological evidence of breast cancer
- Histological and/or radiological evidence of metastases
- Metastasis within 10 years of registry initiation
- Signed informed consent (if a patient has already died at the time of entry, the entry can be made without a declaration of consent)

Due to the non-interventional design of the registry there are no exclusion criteria.

Design & Objectives

This registry is a prospective and retrospective, multicenter collection of data on patients with metastatic breast cancer in Austria. All tumor characteristics, medical histories and also treatment sequences are documented in anonymised form. For documentation in the registry, no further diagnostic or therapeutic measures are required than those already necessary in general. Participation in the registry must not interfere with treatment routines. A written consent must be obtained prior to the input of data. No informed consent is required from deceased patients.

Epidemiological evaluations:
- General characteristics of metastatic breast cancer patients
- Breast cancer subtypes in metastatic disease
- Specific characteristics and frequency of metastatic breast cancer in men
- Data on survival of patients with metastatic breast cancer in dependency of breast cancer subtype, age, menopausal status, stage at diagnosis, disease-free survival, location of metastases and additional diagnoses, respectively

Therapy-specific evaluations:
- Response to specific therapies (CDK4/6 inhibitors, mTOR inhibitors, anti-HER2 therapies, bevacizumab etc.)
- Response to specific therapies in different treatment-lines (fist- vs. second-line vs. beyond etc.)

Specific questions:
- Frequency of histologic assessment of metastases
- Frequency of histological discrepancies between primary and metastases
- Surgery of metastases and of the primary tumor in metastatic breast cancer
- Differences in metastatic spread between breast cancer subtypes

Results (as of January 2019)

Table 1: Recruitment

Site	Patients	%
PMU Salzburg / Innere Medizin III	521	41,0%
Ordensklinikum Linz / Interne I	227	17,9%
Kepler UK, Med. Campus III. / UK Hämatologie	107	8,4%
LKH Hochsteiermark / Dep. Hämato-Onkologie	107	8,4%
UK Graz / Innere Medizin - Onkologie	85	6,7%
Klinikum Wels Grieskirchen / Innere Medizin IV	54	4,3%
UK Innsbruck / UK für Frauenheilkunde	53	4,2%
LKH Feldkirch / Innere Medizin II - Interne E	50	3,9%
BKH Kufstein / Interne II	47	3,7%
AKH Wien / UK für Frauenheilkunde	18	1,4%
LKH Steyr / Innere Medizin II	1	0,1%
TOTAL	**1270**	**100%**

Table 2: Patient characteristics

N = 1270	Patients	%
Male patients	10/1270	0,8%
Median age at diagnosis of metastatic disease (range)	62 (24-97)	
< 40	73/1270	5,7%
40-59	460/1270	36,2%
60-79	610/1270	48,0%
≥ 80	127/1270	10,0%
Diagnosis of further malignancies*	128/1270	10,1%
Severe further diagnoses**	473/1270	37,2%
More than one diagnosis	140/1270	11,0%

Table 3: Biology primary tumor

N = 1583		Patients	%
If a patient had more than 1 primary tumor or more than one biopsy/surgery he/she was assessed as 2 different patients			
Total number of primary breast tumors		1583= 1.2 per patient	
Number of primary breast tumours per patient (N=1270)	1	1017/1270	80,1%
	2	213/1270	16,8%
	3	26/1270	2,0%
	≥ 4	14/1270	1,1%
Histology	No special type (NST)	1064/1583	67,2%
	Invasive lobular	214/1583	13,5%
	Mixed NST and lobular	69/1583	4,4%
	other + unknown	236/1583	14,9%
Grading	1	76/1583	4,8%
	2	734/1583	46,4%
	3	594/1583	37,5%
	unknown	179/1583	11,3%
Breast cancer subtypes *(only if both HR- and HER2-status were known, n = 1320)*	HR+/HER2- (luminal A+B)	805/1320	61,0%
	HR+/HER2+ (luminal/HER2+)	175/1320	13,3%
	HR-/HER2+ (HER2+)	106/1320	8,0%
	HR-/HER2- (triple-negative)	234/1320	17,7%

* Colon/rectum (18), melanoma (15), lung (12), ovary (10), kidney (9), tyroid (4), bladder (4), stomach (3), pancreas (3), oesophagus (1), head and neck (1), other (43)
** Diabetes 1or 2 (113), congestive heart failure (48), renal failure - no dialysis (42), coronary heart disease (41), cAVK (41), chronic lung disease (34), ulcus disease (9), pAVK (8), myocardial infarction (6), dementia (5), liver cirrhosis (4), renal failure - dialysis (3), chronic hepatitis (2)

Table 4: Biology of metastases only

N = 636		Patients	%
Histology	No special type (NST)	319/636	50,2%
	Invasive lobular	56/636	8,8%
	Mixed NST and lobular	4/636	0,6%
	other or unknown	257/636	40,4%
Grading	1	10/636	1,6%
	2	136/636	21,4%
	3	193/636	30,3%
	unknown	297/636	46,7%
Breast cancer subtypes *(only if both HR- and HER2-status were known, n = 399)*	HR+/HER2- (luminal A+B)	236/399	59,1%
	HR+/HER2+ (luminal/HER2+)	53/399	13,3%
	HR-/HER2+ (HER2+)	34/399	8,5%
	HR-/HER2- (triple-negative)	76/399	19,0%

Table 5: Early breast cancer-therapy

N = 821 Stage I-III disease at diagnosis	Patients	%
(Neo)adjuvant therapy	732/821	89,2%
(Neo)adjuvant chemotherapy	516/732	70,5%
(Neo)adjuvant trastuzumab *HER2-positiv (n = 125)*	73/125	58,4%
(Neo)adjuvant endocrine therapy *HR-positive (n = 550)*	484/550	88,0%
Median duration of endocrine therapy (range)	2.0 years (0.1-15.9)	
Adjuvant radiotherapy	573/821	69,8%
Breast conserving therapy	383/821	46,7%
Mastectomy	387/821	47,1%
Type of surgery unknown	17/821	2,1%

Outlook

Due to a detailed electronic case report form (eCRF), the AGMT_MBC-Registry aims to answer several question that will never be addressed in prospective clinical trials. The registry collects data about the primary tumor and its therapy, but also captures type and response to every treatment line for metastatic disease. Therefore, the efficacy of every treatment line can be evaluated and questions about the optimal therapy sequence can be addressed. Paired tumor samples from primary tumor and metastatic sites allow to study the tumor biology over time and to answer translational research questions.

AGMT® Austrian Group • Medical • Tumor Therapy

An academic registry
Sponsor: Arbeitsgemeinschaft medikamentöse Tumortherapie gemeinnützige GmbH,
Clinical-Scientific Director: R. Greil

AGMT mbc REGISTER