



The Societal Impact of Obinutuzumab in the First Line Treatment of Patients with Follicular Lymphoma in Germany

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Background and research aim

- Despite effective treatment options, follicular lymphoma (FL) is still incurable and associated with relapses and multiple lines of treatment for most patients.
- Recent research showed that **Obinutuzumab** significantly prolongs progression-free survival (PFS) and reduces the risk for an early relapse in patients with follicular lymphoma (FL).
- In this study, we quantify the **societal and economic benefits** of an Obinutuzumab-based first line (1L) treatment of FL.
- Furthermore, we analyze to what extent improvements in the 1L therapy can **reduce costs** for further treatment.

Methodology

1 Basis: The health footprint

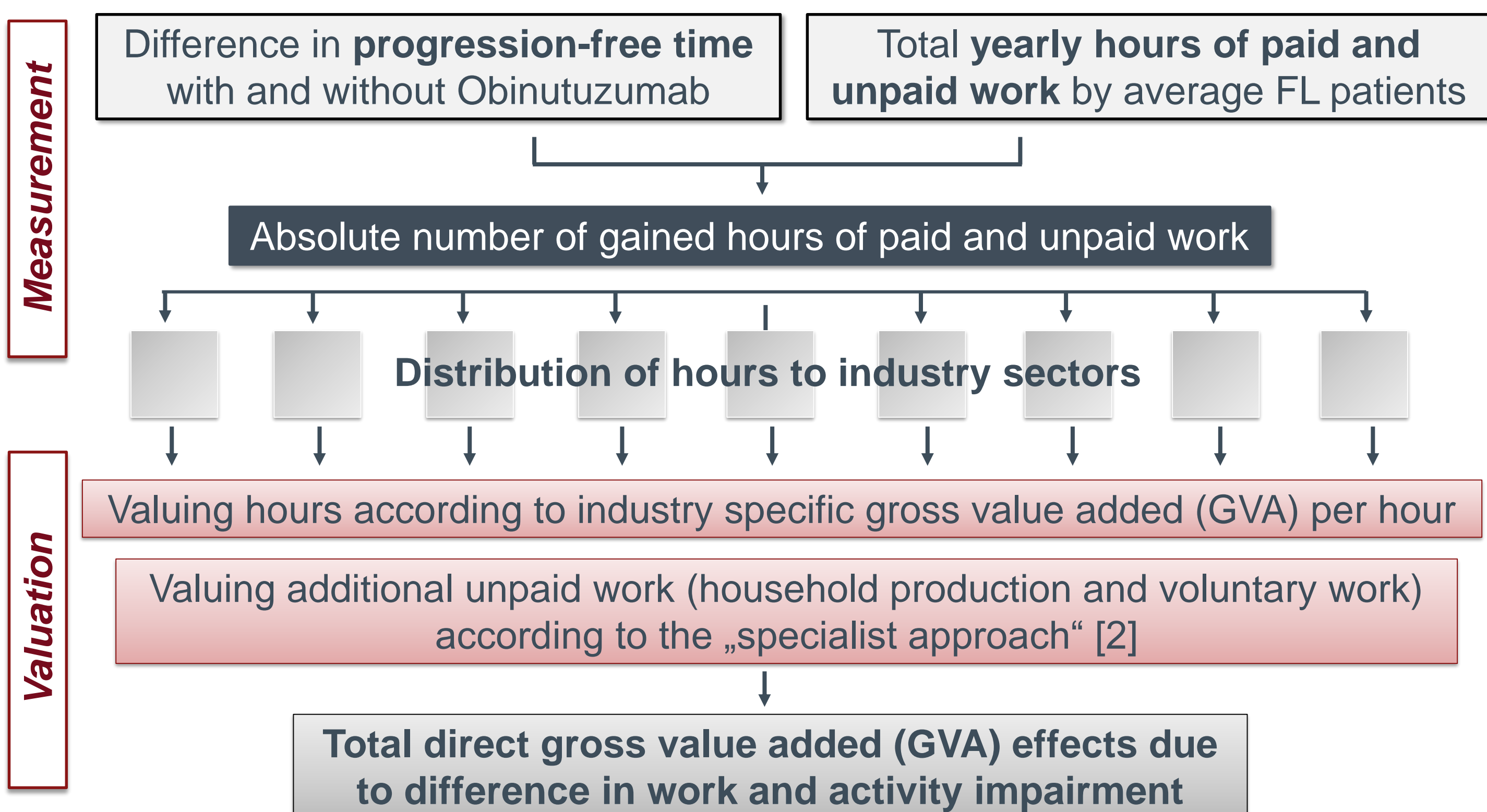
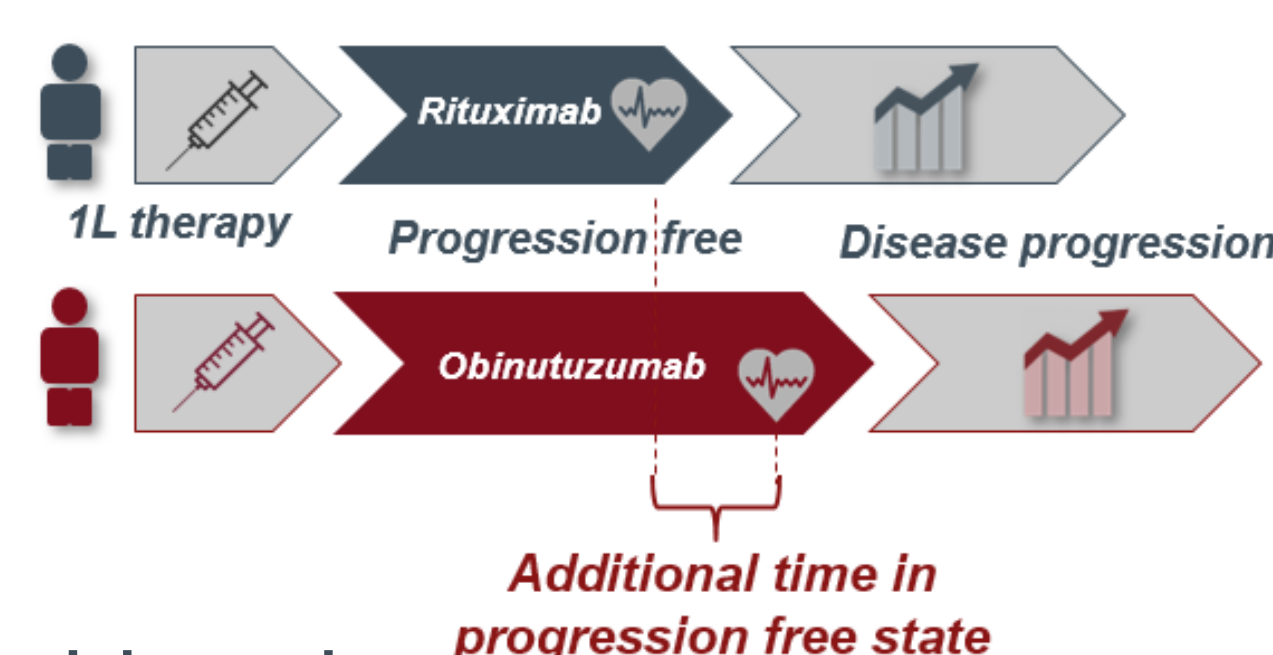
- 1.1 Calculation of health benefits in two alternative treatment scenarios using a Markov model [1]:#
 - **Obinutuzumab (G-chemo) vs. Rituximab (R-chemo*)**
 - Outcome: **Progression-free survival (PFS)**
- 1.2 Extrapolation of the health benefits to the overall patient population up to the year 2030 using an open cohort population model stratified by different age groups.

Assuming that all patients for whom a treatment with Obinutuzumab is indicated, receive either Obinutuzumab or Rituximab (two hypothetical scenarios). * Current standard of care.

2 The socio-economic footprint

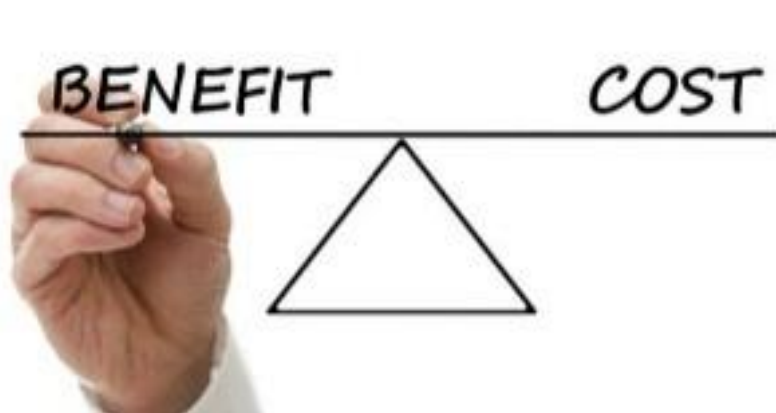
Translation of additional PFS into **activity and productivity gains**:

- Length of PFS relevant for additional productivity
- Consideration of both paid and unpaid work
- Calculation of radiating economic effects



3 Value-invest analysis

Comparison of benefits and additional costs for the use of Obinutuzumab in 1L therapy of FL



- Consideration of:
- Additional costs in 1L therapy
 - Changes in costs of follow-up therapies due to lower (and later) relapse rates

Results

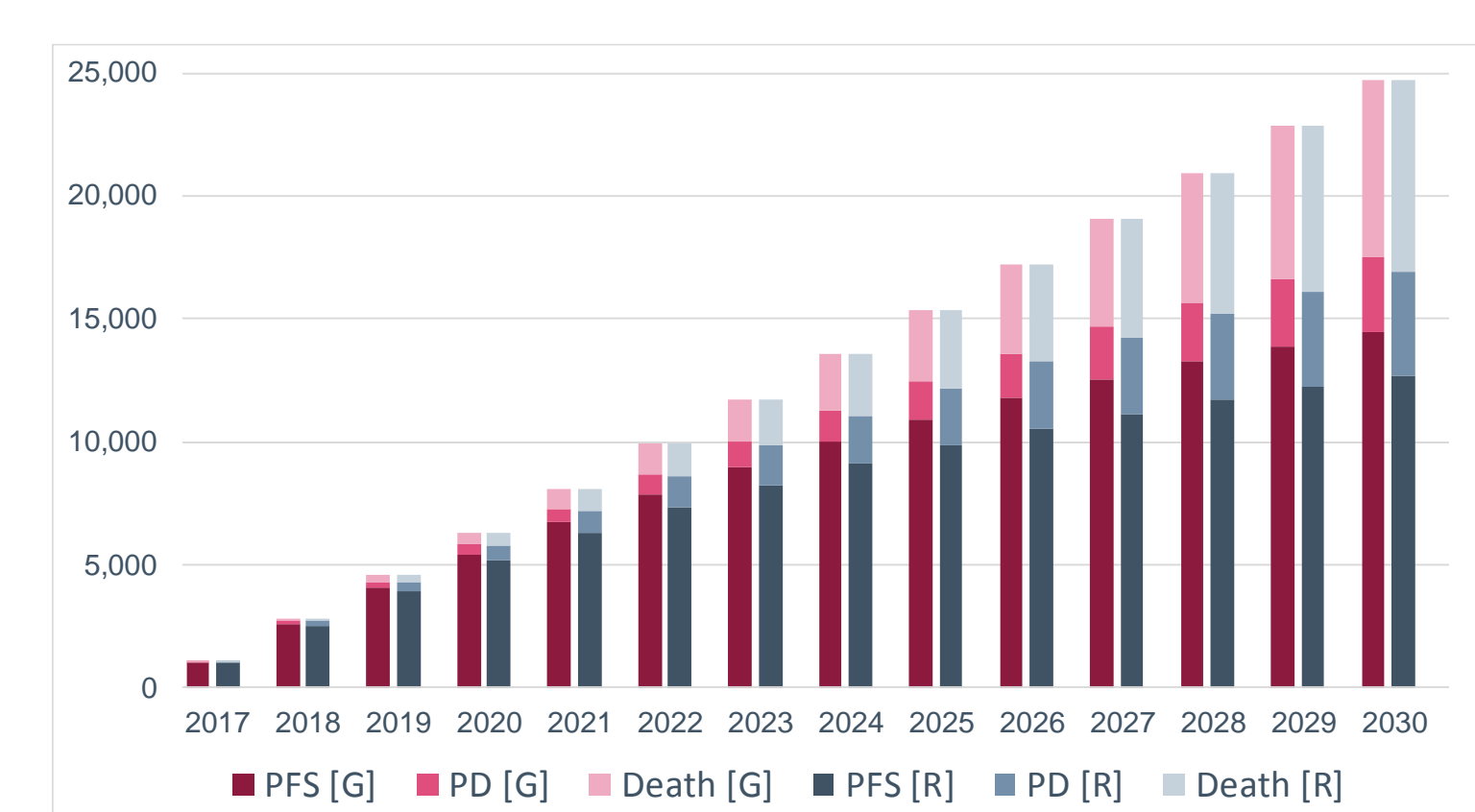
Summary



1 PFS gains of a treatment with Obinutuzumab

- From 2017 to 2030, there are 25,419 patients entering the model
- Through 2030, the use of G-chemo can lead to **additional 11,870 years of PFS** in the German 1L FL patient population compared to R-chemo

Patient-years in different health states per treatment regimen and year



2 Activity and productivity gains

The additional years of PFS correspond to...

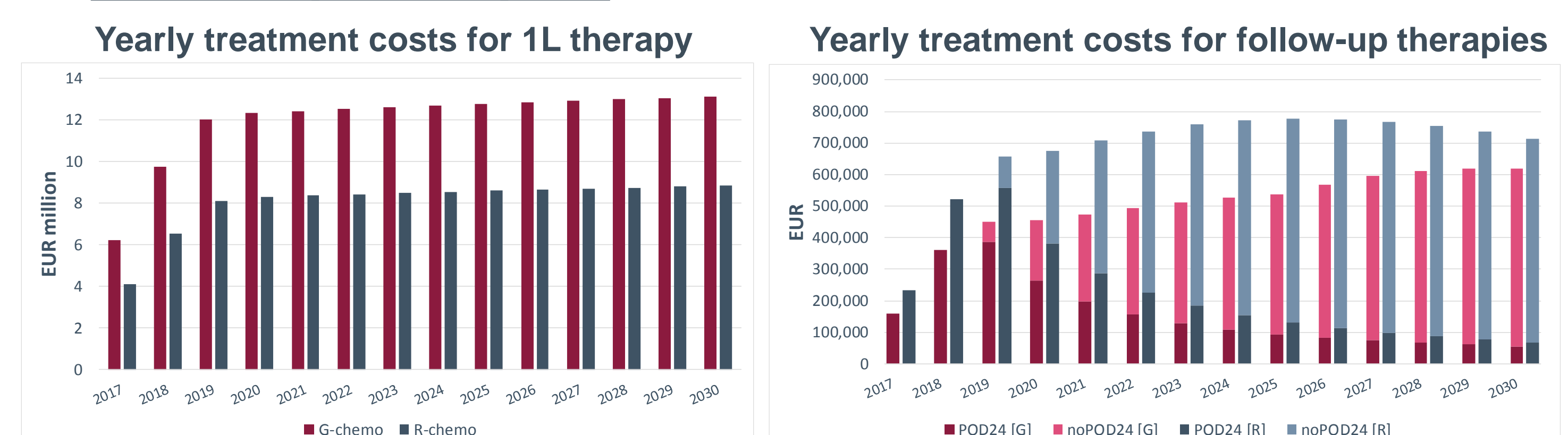


* Assuming employment rates between 4 % and 90 %, depending on gender and age group, as well as on average 1,400 hours of household production per person per year and taking into account the activity impairment due to the disease.

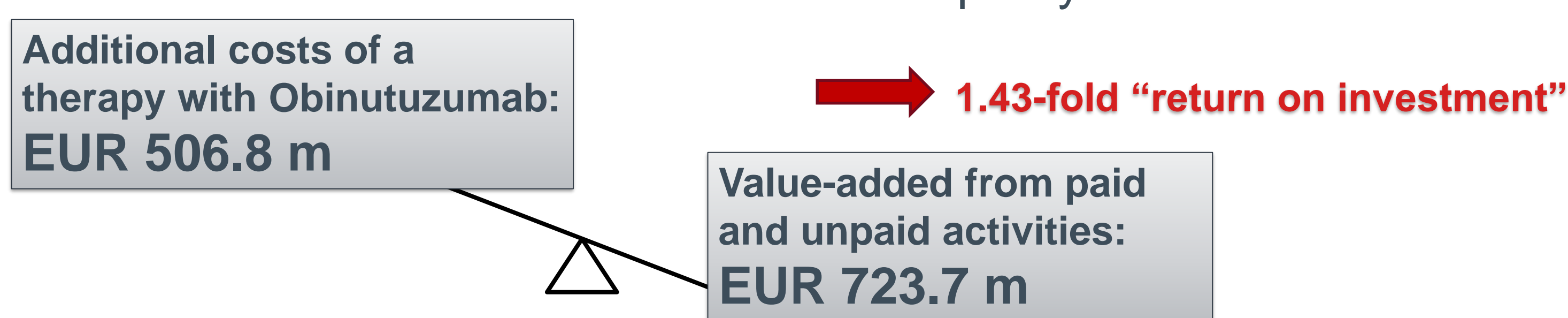
The Socio-economic footprint of the use of Obinutuzumab from 2017 to 2030

	Direct	Indirect	Induced
Paid work	EUR 90.1 m	EUR 60.0 m	EUR 37.8 m
Unpaid work	EUR 267.1 m	EUR 168.0 m	EUR 100.8 m
Total social impact	EUR 723.75 m		
Social impact, per patient-year	EUR 3,532		

3 Costs for 1L therapy & aggregated costs for follow-up therapies



- Higher average costs for treatment with Obinutuzumab
 - **Additional costs of about EUR 551 million (2017-2030)**
- Over the period 2017-2030, after a 1L therapy with Obinutuzumab, **costs for follow-up therapies are about EUR 44 million lower**
 - Additional costs for 1L are partly offset



Acknowledgements: This study was commissioned and sponsored by Roche Pharma AG. Research and writing by Sarah Hofmann and Sebastian Himmler.

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References:
 [1] Marcus, R. E. et al., Obinutuzumab-based induction and maintenance prolongs progression-free survival (PFS) in patients with previously untreated follicular lymphoma: Primary results of the randomized phase 3 GALLIUM study.
 [2] Hofmann S: Einfluss nicht-marktlicher Tätigkeiten auf den materiellen Wohlstand und die Einkommensverteilung in Deutschland. Sozialökonomische Schriften. Frankfurt am Main [Germany], PL Academic Research, 2015, Band 50.