

Effects of the COVID-19 pandemic on survival from childhood cancer



Maike Wellbrock, MSc

Forschungsgruppe Ätiologie und Ungleichheiten bei Kinderkrebs

Abteilung Epidemiologie von Krebs im Kindesalter

Institut für Medizinische Biometrie, Epidemiologie und Informatik (IMBEI)

Universitätsmedizin Mainz

Workshop der AG Krebs epidemiologie (DGEpi) und des Epidemiologischen Krebsregisters Niedersachsen

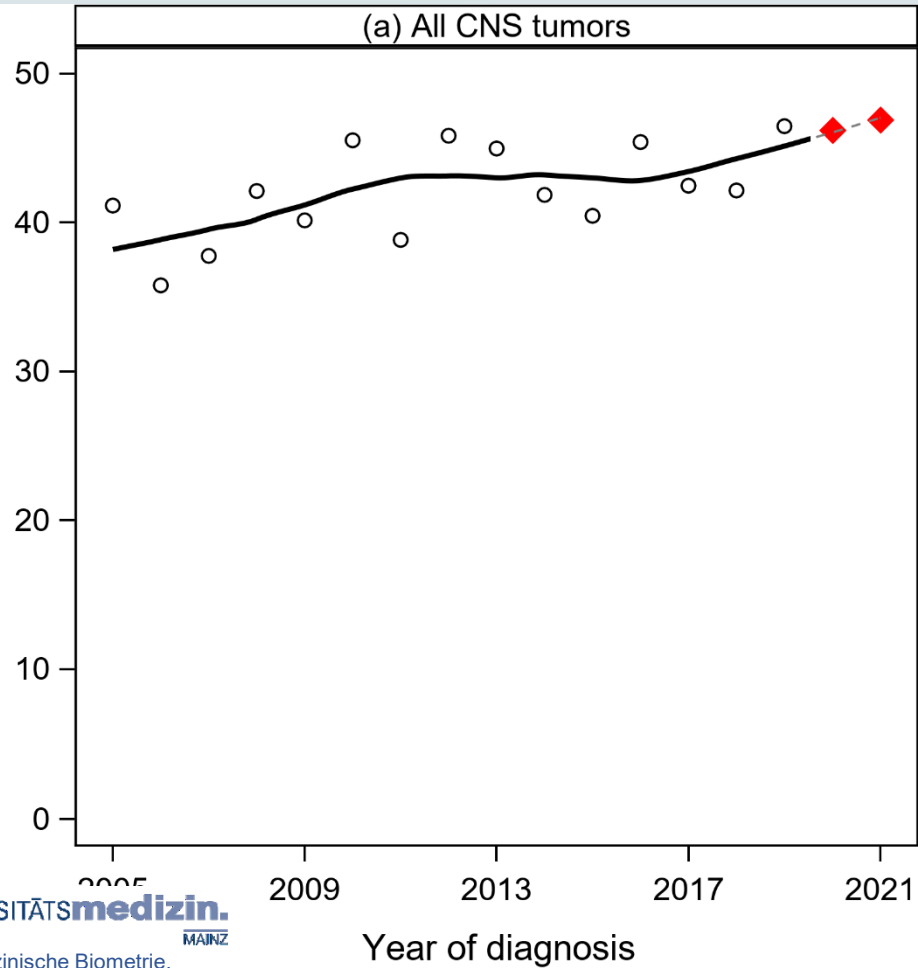
COVID & Krebs – 26.10.2023

Background

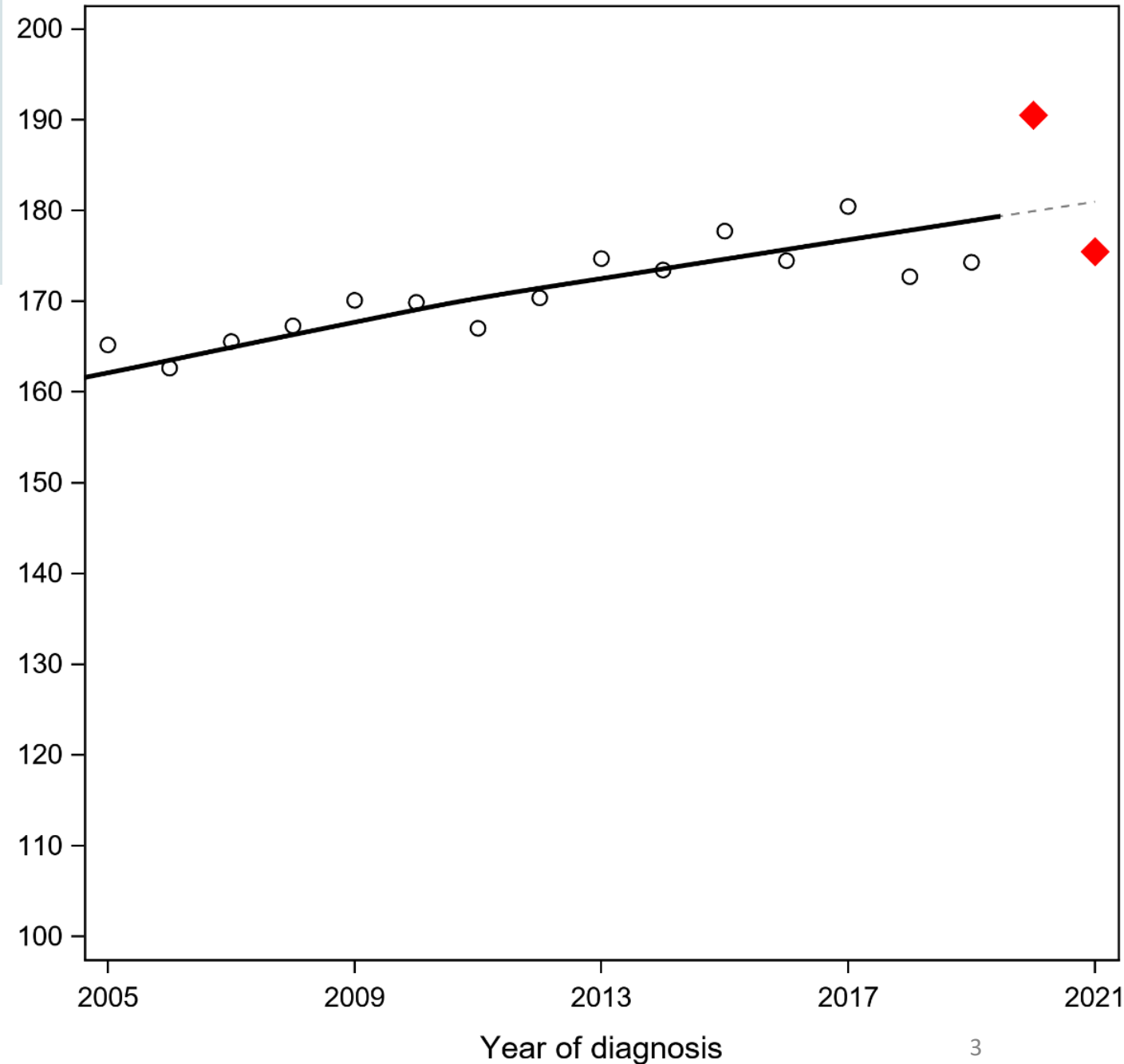
- Decline in cancer diagnoses
 - Reported also for childhood cancer in the US and some European countries
 - Diagnosis at advanced disease stage is associated with poorer prognosis
- Increase in cancer incidence rates for 2020 among children in Germany
 - Drop in 2021 for most cancer types, except for CNS tumours and AML

Background

Age-standardised incidence rates per million

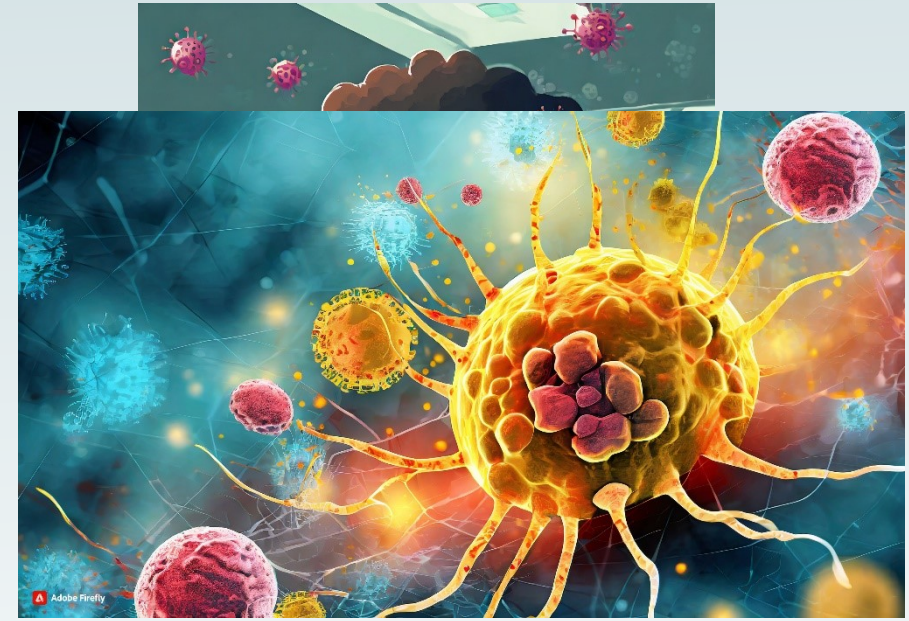


Age-standardised incidence rate per million



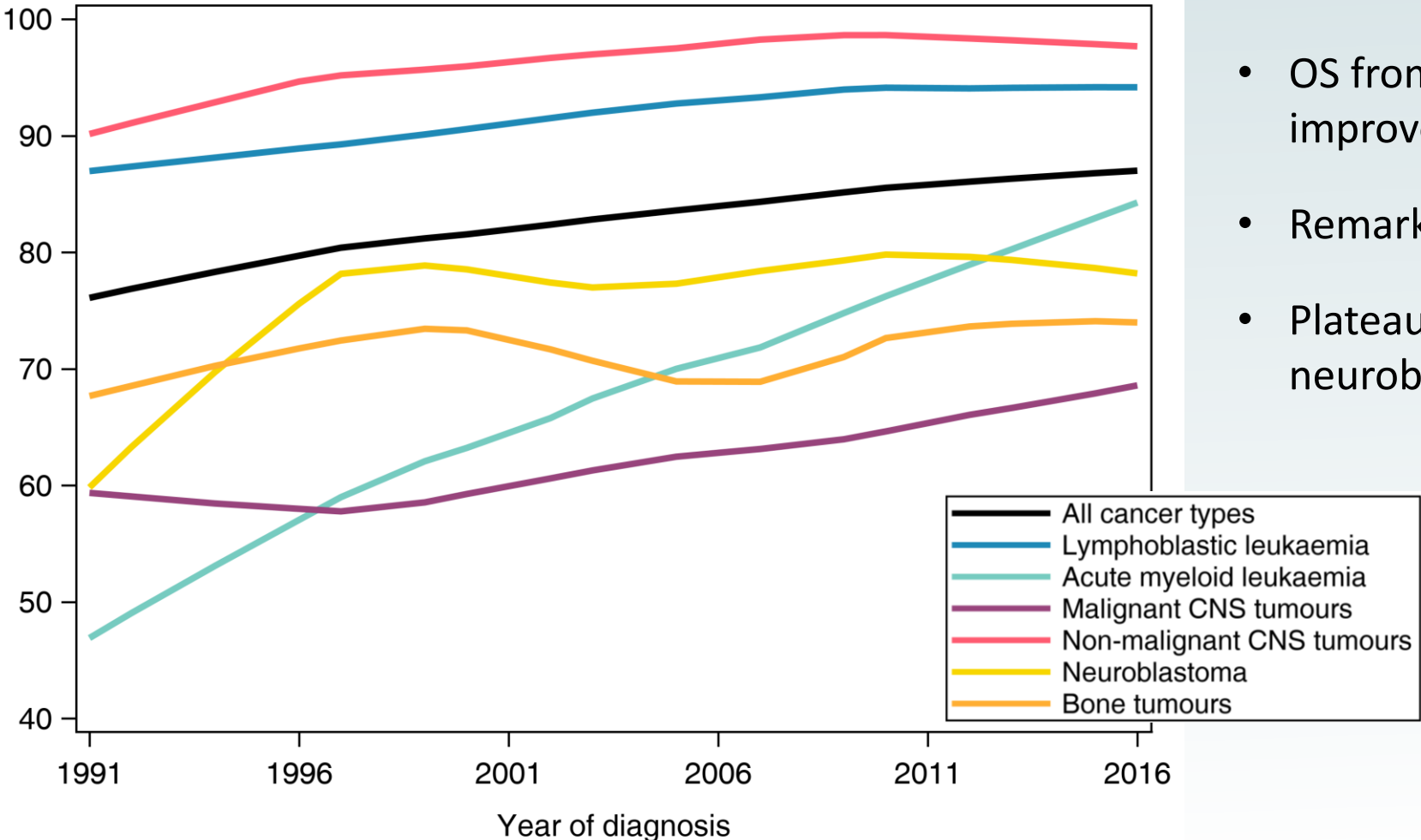
Relevance

- Assumed increased workload
 - Higher number of childhood cancer patients
 - Pandemic-related restrictions
 - (COVID-related) staff shortage
- Children with cancer as vulnerable group
 - Immun suppression and comorbidities
 - More severe disease course (COVID)
 - Impact on individual cancer therapy
 - suggested interaction between cancer and COVID-19 disease
- No population-based assessments of survival from childhood cancer during the COVID-19 pandemic yet



Temporal Survival Patterns | 1991-2016

smoothed 5-year overall survival (OS)



- OS from all cancers combined improved from 78% to 87%
- Remarkable increase in AML survival
- Plateauing survival for neuroblastoma and bone tumours

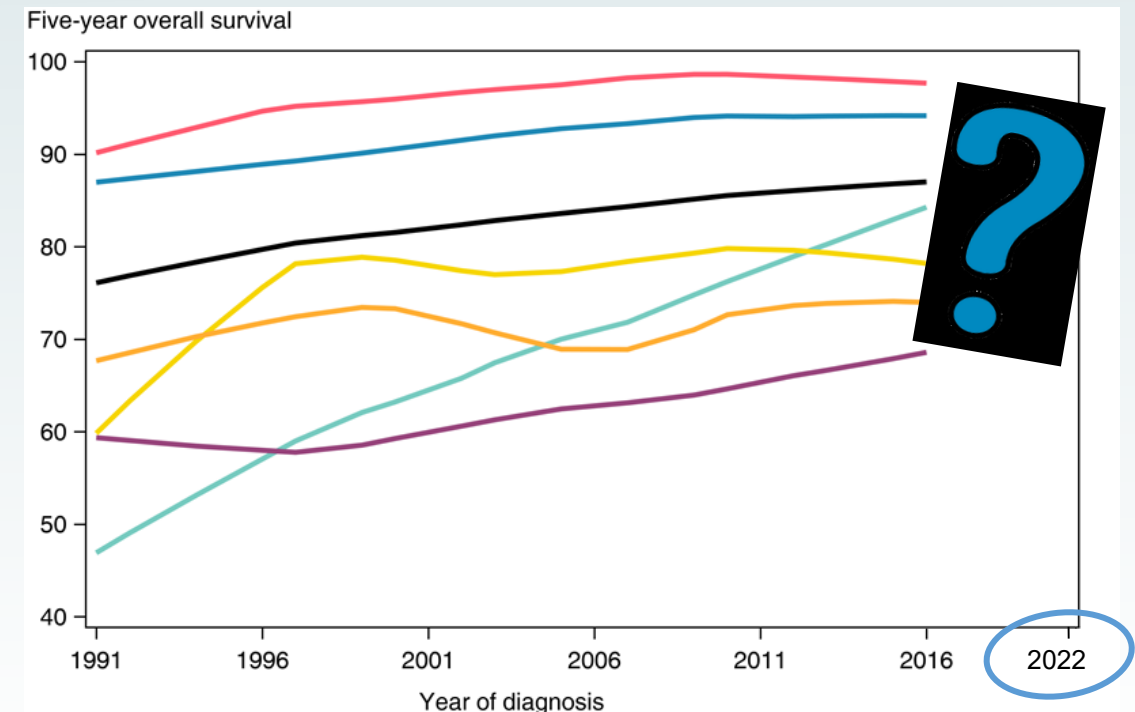


SCAN ME

Objective

- First population-based assessment of the impact of
 - COVID-19 disease on cancer treatment (direct effect)
 - pandemic-related conditions in oncology units on cancer treatment (indirect effect)

➤ Restrictions in diagnostics and/ or treatment may affect childhood cancer survival?



Acknowledgements



Friederike Erdmann
&
all my colleagues from the
German Childhood Cancer Registry



Contact information:

Maïke Wellbrock, MSc
E-Mail: mwellbro@uni-mainz.de

Research group: Aetiology and Inequalities
in Childhood Cancer

Division of Childhood Cancer Epidemiology
Institute of Medical Biostatistics, Epidemiology
and Informatics (IMBEI)

University Medical Center of the Johannes
Gutenberg University Mainz