

# Understanding the use of monoclonal antibodies (mAbs) for COVID-19 pre-exposure prophylaxis (PrEP) in patients with hematological malignancies - insights from clinician interviews in Germany

Enyal Lani<sup>1</sup>, Andrea Polokaova<sup>1</sup>, Katherine Mercer<sup>1</sup>, Manuela Hoechstetter<sup>2</sup>, Petra Langerbeins<sup>3</sup>, Oliver Kriege<sup>4</sup>, Daniel Teschner<sup>4,5</sup>, Christina Rieger<sup>6</sup>. <sup>1</sup>Aquarius Population Health Ltd, UK; <sup>2</sup>Interdisciplinary Oncology Center Munich, Hematology & Oncology, Germany; <sup>3</sup>Center for Integrated Oncology Aachen Bonn Cologne Dusseldorf (CIO ABCD), University of Cologne, Germany; <sup>4</sup>Department of Haematology & Medical Oncology, University Medical Centre of the Johannes Gutenberg University Mainz, Germany; <sup>5</sup>Department of Internal Medicine II, University Hospital Würzburg, Germany; <sup>6</sup>University of Munich, Germany.

## Introduction & Aim

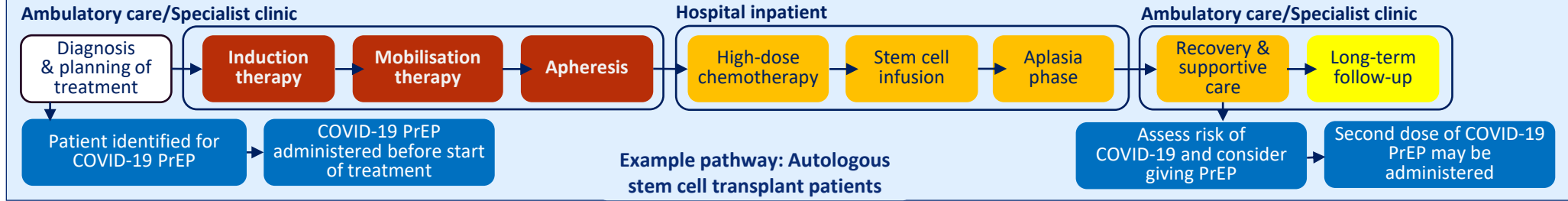
Patients with hematological malignancies (HM) have a higher risk of severe COVID-19 outcomes due to weakened immunity from underlying disease and immunosuppressive treatments and do not respond sufficiently to COVID-19 vaccination.<sup>1,2</sup> Monoclonal antibodies (mAbs) used as COVID-19 pre-exposure prophylaxis (PrEP) reduce morbidity and mortality in these patients<sup>3-5</sup>. Our aim was to understand the use of COVID-19 PrEP in HM patients, healthcare implementation challenges and best practices in Germany.

## Methods

Through semi-structured, in-depth interviews (Sep-Nov 23) with five hemato-oncologists in Germany, we mapped care pathways for the most immunosuppressive treatments, highlighting opportunities for COVID-19 PrEP administration and exploring clinicians' perspectives on COVID-19 PrEP use. Interview transcripts were double-coded and thematic content was analysed.

## Results

Care pathways were mapped for patients undergoing autologous and allogeneic hematopoietic stem cell transplant, CAR-T cell therapy, and B-cell-depleting therapies. The pathway maps were used to visualise opportunities for administering COVID-19 PrEP. **Six key themes emerged.**



**1 Protection and treatment continuity**  
PrEP protects hematology patients from severe COVID-19, ensuring treatment continuity.

*"Once we had PrEP available, I felt more comfortable with proceeding with the regular chemoimmunotherapy and not omitting or stopping anti-CD20 treatment."*

**2 Patients' attitudes**  
The availability of PrEP reduced patients' anxiety and fears regarding COVID-19.

*"So, patients were pretty scared during the beginning of the pandemic (...) so, of course, they are very open-minded for a COVID-19 PrEP actually. COVID-19 is just a piece of the puzzle of their fear and anxiety towards the severe infection."*

**3 Communication and leadership**  
Effective communication and leadership from experienced hematologists facilitated PrEP adoption.

*"To be honest, lots of colleagues sought advice from me. I had a lot of calls. Is this a patient eligible again for a vaccination, or would you give them COVID PrEP?"*

**4 Knowledge about mAbs for COVID-19**  
Less experienced onco-hematologists and primary care clinicians were hesitant to adopt mAbs.

*"There were some clinicians who didn't touch these new medications (...) and were not prescribing them, even after reimbursement, so I think more education for the other doctors might be helpful."*

**5 Healthcare system factors**  
Challenges related to guidelines and reimbursement.

*"I wish that guidelines would define the high-risk groups a little bit more. I think at this time point, we were uncertain if everybody needed PrEP."*

**6 Hematology setting**  
Large hospitals have greater capacity to implement changes.

*"Yes, we could manage the workload, since we had a nurse who was organising it. She called the patient, made the appointment and also did the administration."*

## Discussion

This study highlights the importance of healthcare **resources** and **infrastructure** to administer COVID-19 PrEP, **clear guidelines**, **collaboration** and **knowledge-sharing** between experts via consulting tools/infectious boards, and **education** of primary and secondary care physicians to enhance PrEP adoption.

**Key strengths:** The use of systematic qualitative methods identified specific challenges and best practices in adopting COVID-19 PrEP.

**Limitations:** The small sample size limits the generalisability of findings. The timing of the interviews, during a decline in COVID-19 PrEP effectiveness, may have influenced responses.

**Implications:** The challenges identified and best practices in this setting provide valuable insights for optimising health systems' response in managing future COVID-19 waves and other pandemics.

**References:** <sup>1</sup>Klank D *et al.*, HemaSphere. 2021 Nov;5(11):e651; <sup>2</sup>Langerbeins P *et al.*, Annals of Hematology. 2024 Jun;103(6):2123-31; <sup>3</sup>Gupta A *et al.*, N Engl J Med. 2021 Nov 17;385(21):1941-50; <sup>4</sup>O'Brien MP *et al.*, N Engl J Med. 2021 Sep 22;385(13):1184-95; <sup>5</sup>Agrawal U *et al.*, The Lancet. 2022 Oct 15;400(10360):1305-20.

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**Contact:** Enyal Lani, Aquarius Population Health, Unit 16, Tileyard Studios, Tileyard Rd, London N7 9AH [info@aquariusph.com](mailto:info@aquariusph.com); [www.aquariusph.com](http://www.aquariusph.com)