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CONTROVERSIES IN MULTIPLE MYELOMA (COMy)

# Uncovering Disparities and Opportunities: Identifying CAR T Therapy-eligible Patients in a Real-World Multiple Myeloma Population

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## INTRODUCTION

- The South East London Plasma Cell Disorders (SEL PCD) registry is a database capturing real-world data from patients with multiple myeloma and related plasma cell disorders across 3 hospital sites in London.
- Chimeric antigen T (CAR T)-cell products Ciltacabtagene autoleucel (Cilta-cel) and Idecabtagene vicleucel (Ide-cel), demonstrated impressive results in myeloma trials CARTITUDE-4 [1] and KarMMa-3 [2], respectively.
- This led to their authorisation by the European Medicines Agency (EMA), but they are not yet funded in the UK National Health Service (NHS).

## STUDY AIMS

- To identify real-world myeloma patients in South East London that are eligible for Cilta-cel and Ide-cel should they receive NHS funding.
- To characterise eligible patients in terms of age, ethnicity, comorbidities, relative deprivation, and number of previous treatment lines to identify potential barriers to equity of access.

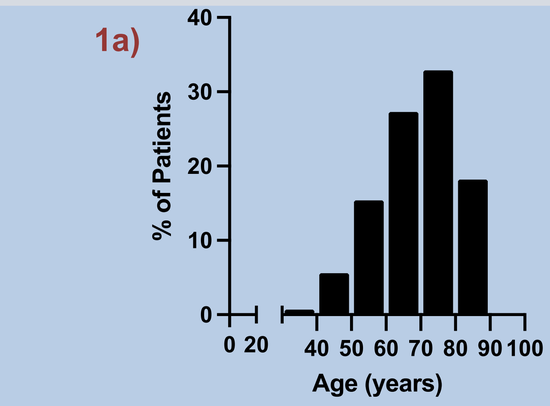
## METHODS

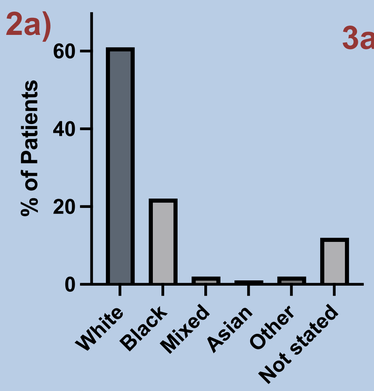
- Data was collected from the the SEL PCD registry with a data cut off date of 12th March 2025.
- The EMA authorisation criteria for Cilta-cel and Ide-cel were used to identify eligible patients.
- **Cilta-cel eligibility:** Received at least 1 previous treatment line including an immunomodulatory agent (ImiD) and proteasome inhibitor (PI)
- **Ide-cel eligibility:** Received at least 2 previous treatment lines including an ImiD, PI and anti-CD38 antibody
- Index of multiple deprivation (IMD) is a measure of relative social and economic deprivation that divides patients into deciles based on their post code.

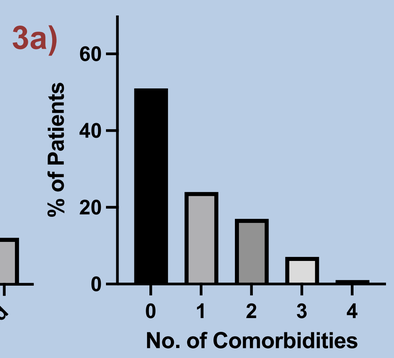
Most deprived → 1 2 3 4 5 6 7 8 9 10 → Least deprived

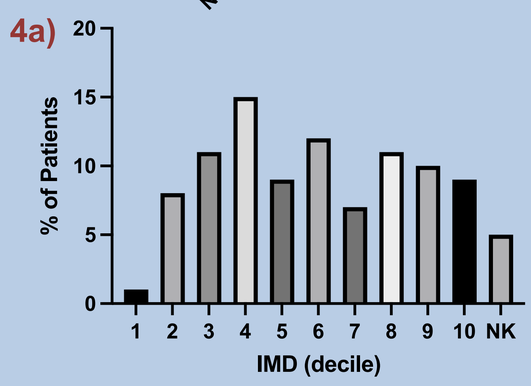
## RESULTS

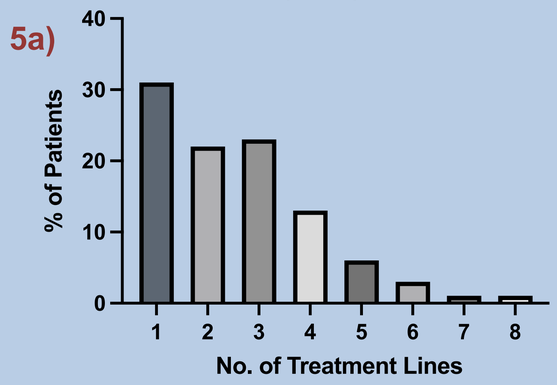
### Cilta-cel eligible patients (n=143)



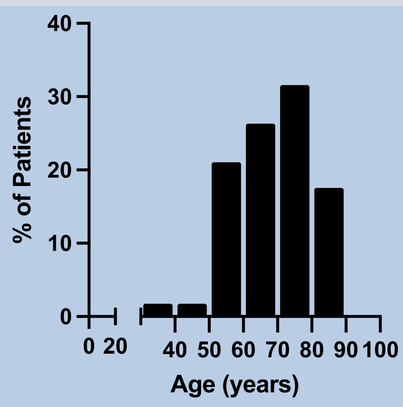



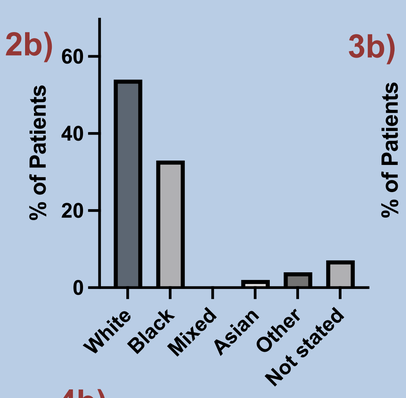



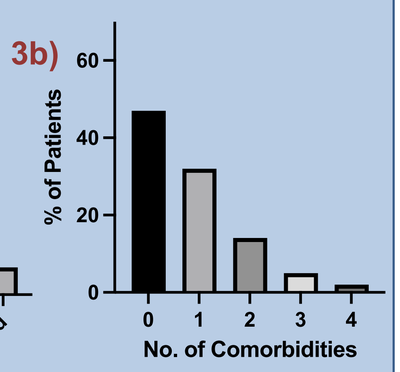



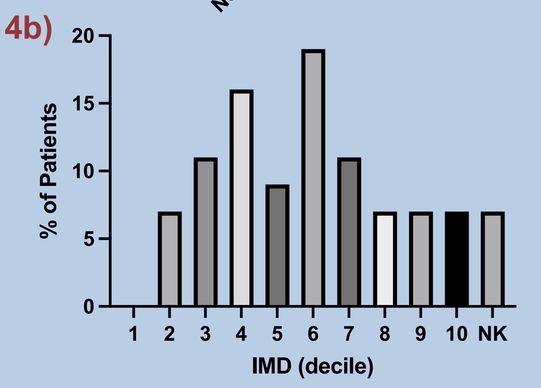



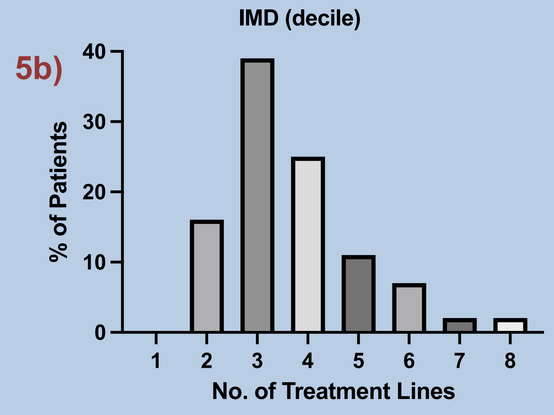

### Ide-cel eligible patients (n=57)




**1)** Age, **2)** Ethnicity, **3)** Number of comorbidities, **4)** Index of multiple deprivation (IMD), NK = not known, **5)** Number of treatment lines all as a percentage of Cilta-cel **(a)** and Ide-cel **(b)** eligible patients.

## CONCLUSIONS

- Real-world myeloma patients in South East London who are eligible for Cilta-cel and Ide-cel were identified.
- Eligible populations were older, more heavily pre-treated and with larger proportions of black patients compared to those in clinical trials [1,2].
- A significant proportion of patients eligible for Cilta-cel and Ide-cel lived in socioeconomically deprived areas (IMD deciles <5) (36% and 33%, respectively) and had 1 or more comorbidity (49% and 53%, respectively).
- These findings highlight potential barriers to CAR T-cell therapies that may be overlooked due to the discrepancy between trial and real-world populations.

## REFERENCES

[1] San-Miguel J, Dhakal B, Yong K, Spencer A, Anguille S, Mateos M-V, et al. Cilta-cel or Standard Care in Lenalidomide-Refractory Multiple Myeloma. New England Journal of Medicine. 2023;389(4):335-47.

[2] Rodriguez-Otero P, Ailawadhi S, Arnulf B, Patel K, Cavo M, Nooka Ajay K, et al. Ide-cel or Standard Regimens in Relapsed and Refractory Multiple Myeloma. New England Journal of Medicine. 2023;388(11):1002-14.

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