

The prevalence of diabetes mellitus(DM), early detection of DM and pathways to direct management of hyperglycaemia in cancer patients whilst receiving systemic anti-cancer therapy (SACT)

Hyperglycaemia in cancer treatment: A prospective cohort study

Background

A number of anti-cancer agents are known to increase the risk of hyperglycaemia, even in individuals without a previous diagnosis of diabetes.

Hyperglycaemia can in turn lead to potentially avoidable treatment interruptions and dose reductions that impact on cancer treatment outcomes. Early intervention to manage glycaemic control is likely to be beneficial.

Method

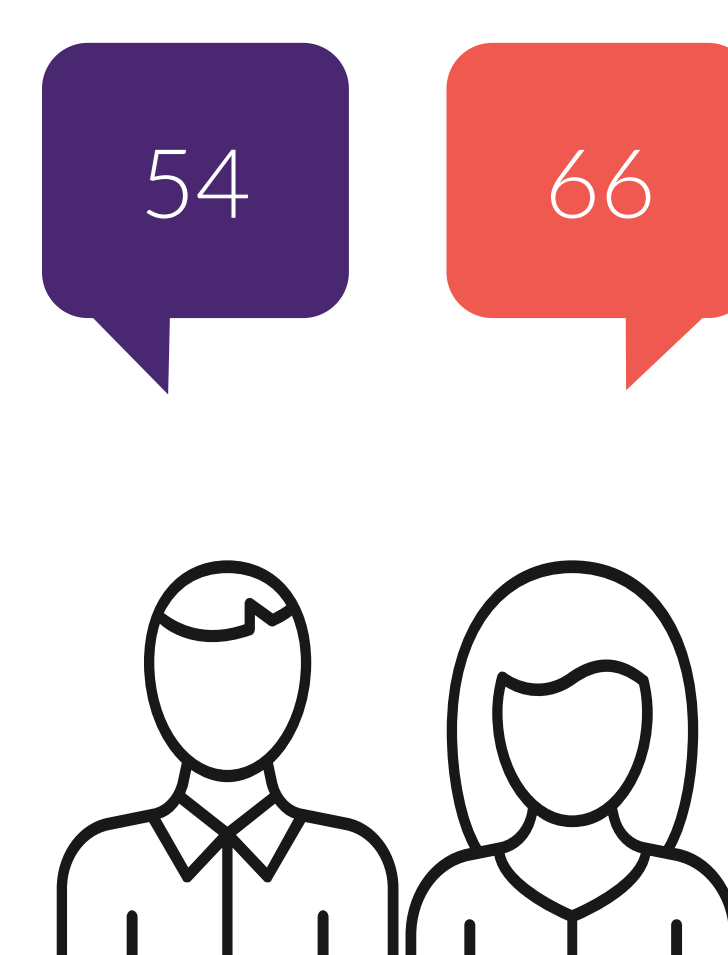
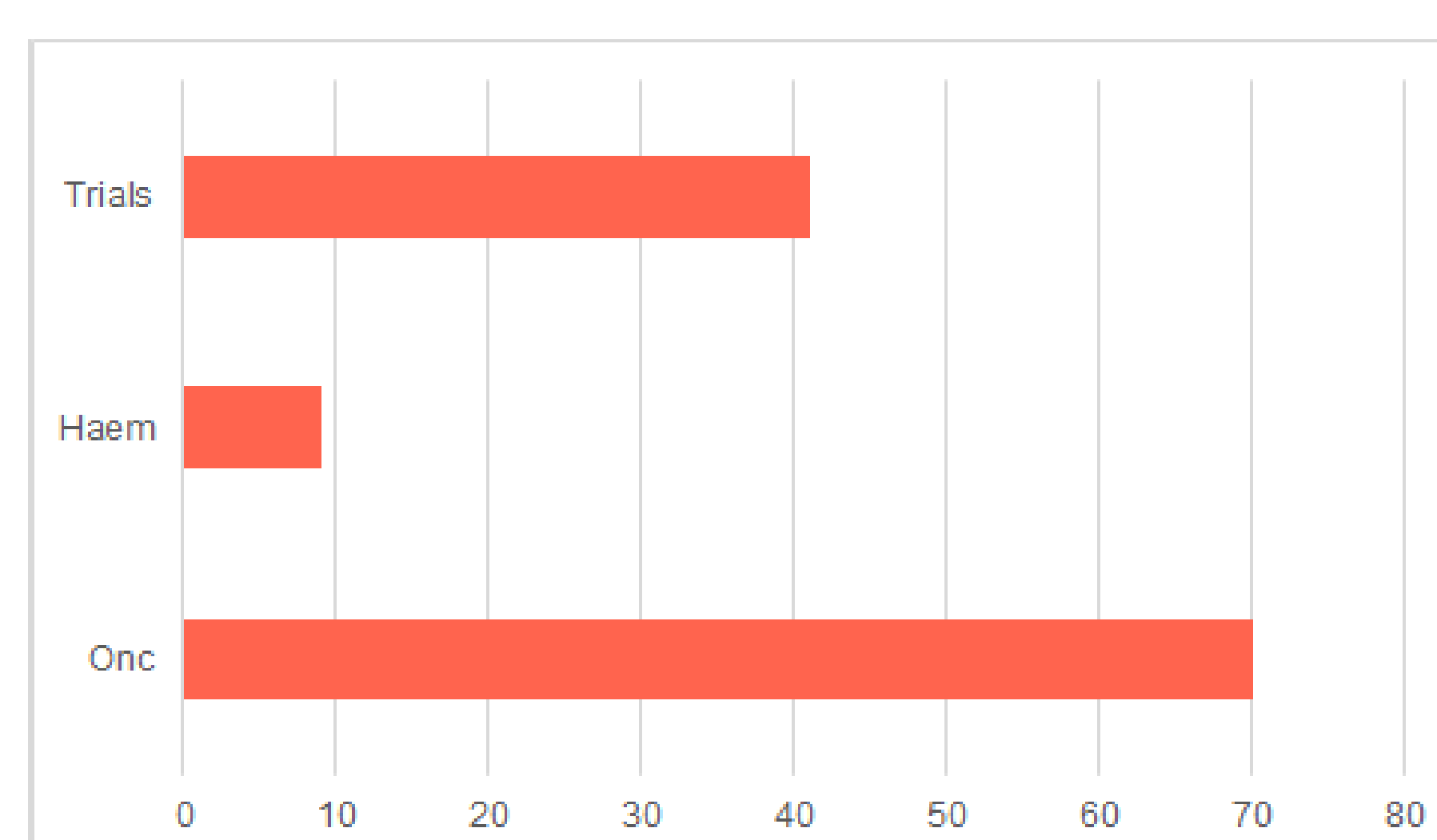
This is a prospective, single centre, cohort study.

Eligibility includes people receiving SACT in the ambulatory setting (intravenous and/or oral anti-cancer treatment).

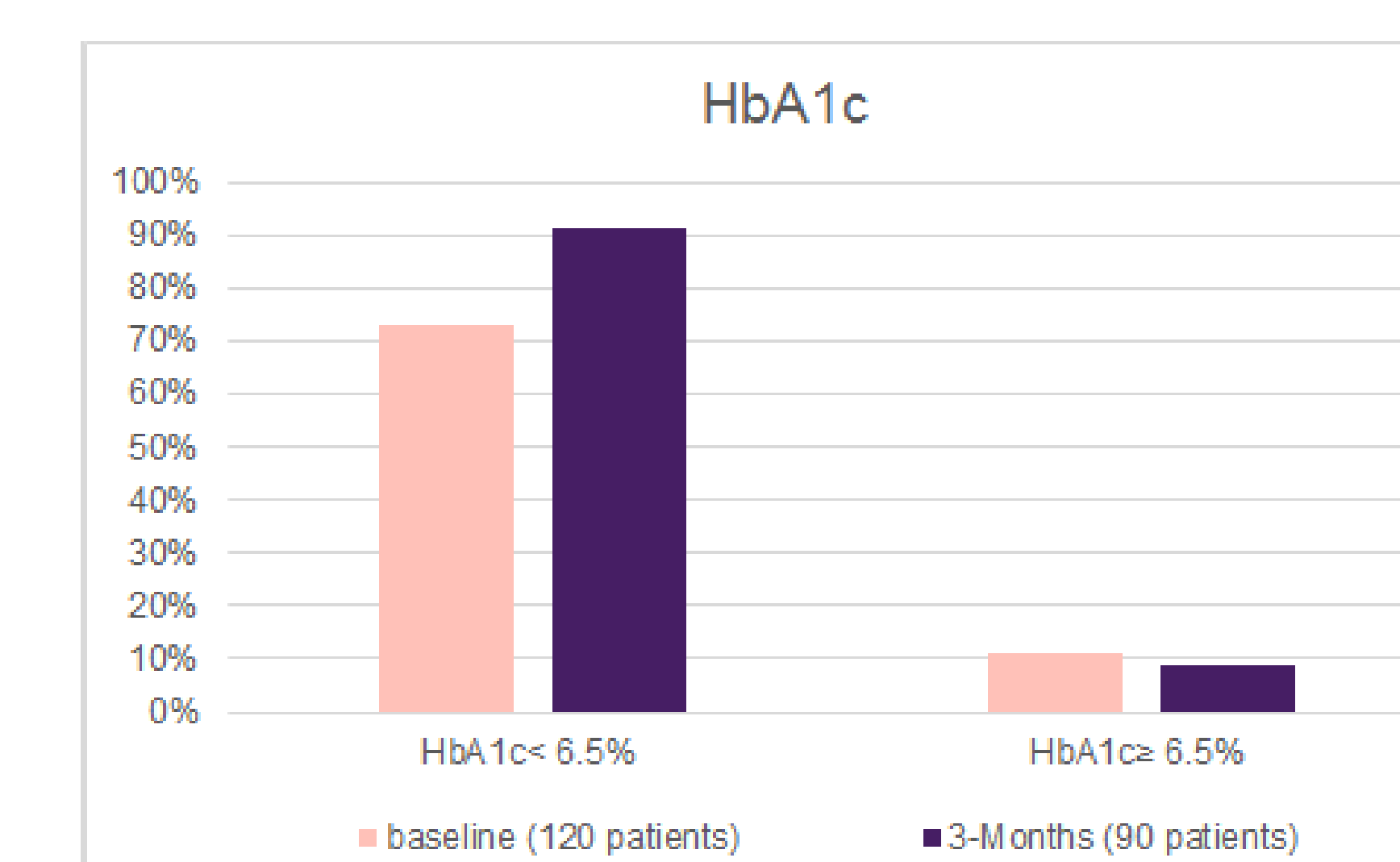
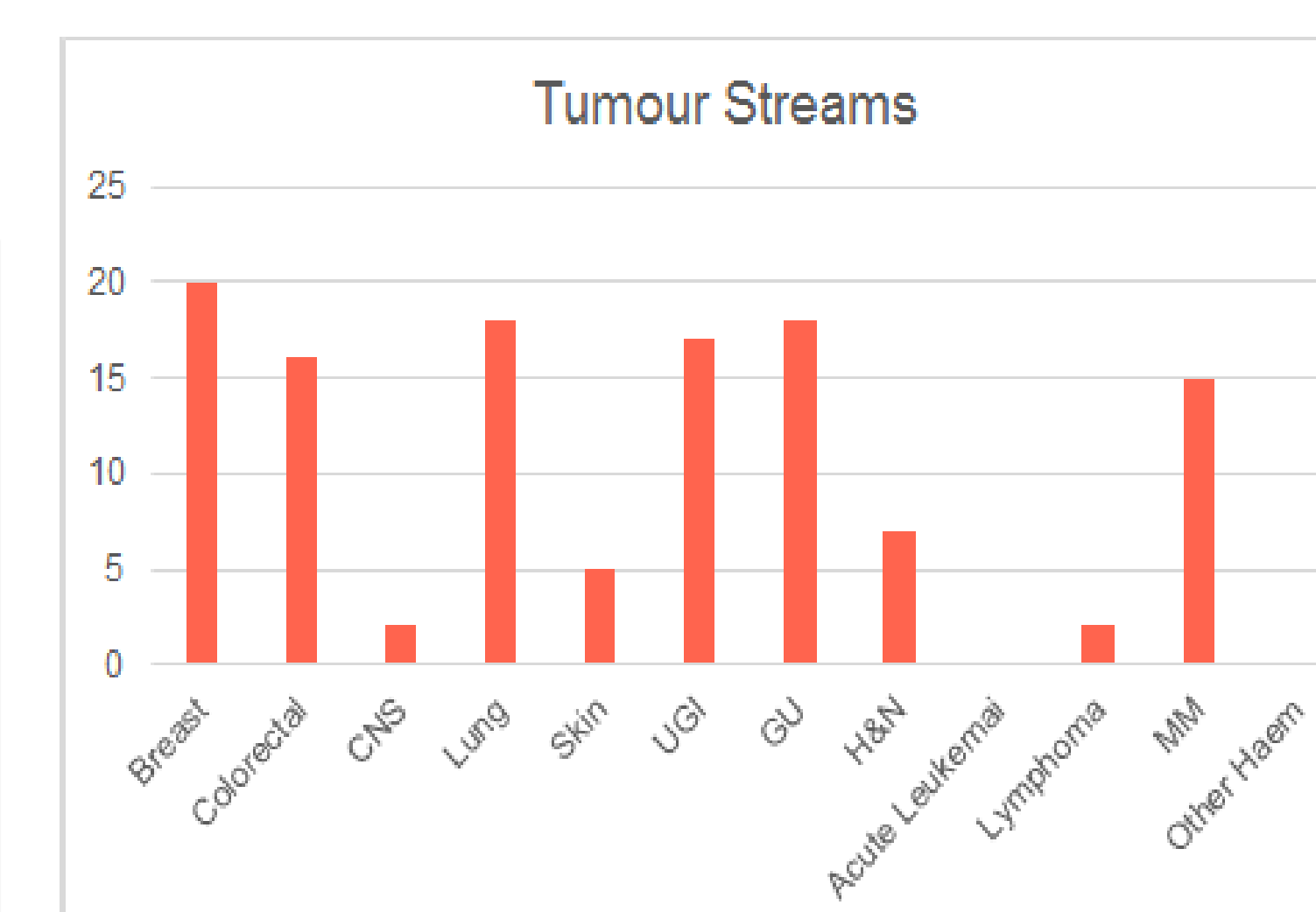
Participants completed a HbA1c (glycated haemoglobin) at baseline (commencement of SACT) and at 3-months. Demographics and clinical/disease characteristics were collected from participants' electronic medical records and entered into REDCap.

Results

- At baseline, 11% (n=13) patients had a HbA1c result $\geq 6.5\%$, with 5 patients having a pre-existing diagnosis of diabetes mellitus(DM).
- At 3-months, 9% (n=8) patients had HbA1c $\geq 6.5\%$, with 2 patients developed DM after commencing SACT.
- After 3-months of SACT, 9% (N=8) patients are in pre-diabetes range, and 6 patients newly became pre-diabetes.
- 64% (n=53) of patients received glucocorticoids as a part of their anti-cancer regimen or supportive care.
- 5 patients were referred to their GP for diabetes management, with none requiring referral to endocrinology.



	Total number (120)	%	MEAN	SD
Ethnicity				
Aboriginal	0	0		
Australian	76	63		
Asia	33	28		
Other	11	9		
BMI			28	5.9
Hb			125.9	15.7



Total of 120 eligible patients were recruited from Feb 2023 – May 2023

Demographics, disease, clinical information

Further research is needed to establish whether individuals receiving SACT are at increased risk of developing diabetes mellitus.

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