











# Global Epidemiology and Outcomes Traumatic Brain Injury registry (GEO-TBI)















### **GEO-TBI**

### Foreword

### Introduction

Dear GEO-TBI participant,

We are delighted to share the first interim report to all the participant institutions. The GEO-TBI registry has been active internationally since the beginning of 2023. Data collection for the GEO-TBI: Incidence study is ongoing. In the report, centre-level results and calculations are reported alongside a registry-level international "benchmark". We believe the data in the full reports (to be circulated end of January) offers interesting insight to the patterns of traumatic brain injury (TBI) mechanisms, management and outcomes, allowing for international comparison.

### Distribution of this report

This report is distributed to all participant institutions. Centre-level data is only included in the report sent to the respective institution – other centres do not have access to this data.

### Rationale behind the metrics

This interim report serves to highlight the number of patients added to the registry at this point in the calendar year and the pathway completeness for these patients (from injury to outcome).

The full report to be circulated at the end of January will include core metrics of TBI case volume, management and short-term outcomes. Data integrity and compliance will be reported first to contextualise the centre-specific clinical numbers and report any gaps in the data. The clinical data is reported at the centre, country and registry levels.

Different injury mechanisms result in differing radiological injury characteristics – these central variables will be described with heat-mapped table charts, as will the relationship of injury mechanism and the Glasgow Coma Scale (GCS). The distribution of different radiological head injury types will be detailed, and the frequency of intracranial pressure (ICP) monitoring is compared against primary injury type. Rates of pre- and in-hospital intubation, time to extubation (TTE) and requirement of surgery will also be reported, stratified by injury type.

Short-term outcomes are to be summarised using GCS scores at admission and discharge. In-hospital mortality will be reported for each primary head injury type alongside in-hospital intracranial infection rates and length of hospital stay (LOS). To account for loss-to-follow-up, the Glasgow Outcome at Discharge Scale (GODS) was collected for each patient, and its relation to injury type will be reported. Finally, longer-term follow-up data are to be summarised using the extended Glasgow Outcome Scale (GOSE).







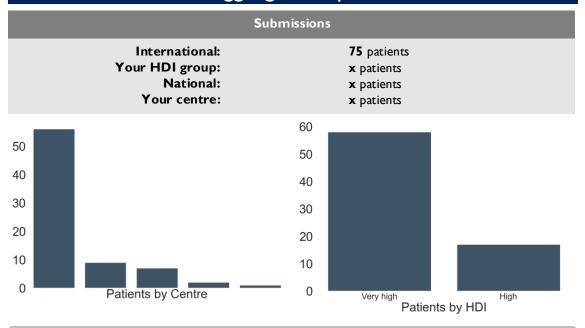






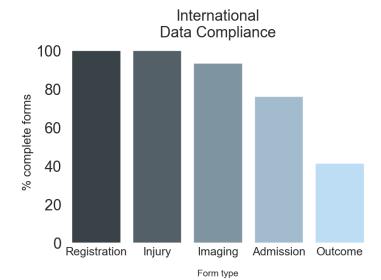
# GEO-TBI Interim Report Jan – Aug 2024

## Aggregate Report



## Data Integrity

	Your centre	National	Your HDI group	International
Patient records with incomplete injury form n[%]	x [x]	x [x]	x [x]	0 [0]
Patient records with incomplete imaging form $n[\%]$	x [x]	x [x]	x [x]	5 [6.7]
Patient records with incomplete admission form $n[\%]$	x [x]	x [x]	x [x]	18 [24]
Patient records with incomplete outcome form n[%]	x [x]	x [x]	x [x]	44 [58.7]



## General Information

#### HDI groupings:

HDI group	HDI	
Very High	>= 0.800	
High	0.700 - 0.799	
Medium	0.550 - 0.699	
Low	< 0.550	

Human Development Index data from the 2022 Human Development Report.

The HDI data provided within this report pertains to the HDI group of the country in which your centre resides.