## Introduction

Traumatic brain injury (TBI) is a major cause of morbidity and mortality in children worldwide and the leading cause of disability and death among pediatric trauma patients. This study aims to investigate the epidemiological characteristics and clinical outcome of children with moderate and severe traumatic brain injury (TBI) using population-based data from a national trauma registry.

## Methods

The research design is a nationwide, observational cohort study based on prospectively collected data from the national trauma registry. The study period includes all pediatric patients with moderate or severe TBI (according to AIS severity) included in the National Trauma Registry of Norway between 01.01.2017 and 31.12.2020.

## Results

Overall, 348 children with moderate or severe TBI were identified from the database, 289 with moderate TBI (AIS 3-4) and 59 with severe TBI (AIS≥5). Mortality rates were 4% and 75 respectively. Favorable outcome with low or moderate disability (GOS 4-5) was observed in 88% and 46% respectively.