Acute invasive fungal sinusitis is a rapidly progressive, potentially lethal form of fungal sinusitis, that is rare in the general population and immunocompetent patients. Early diagnosis is important considering its’ high mortality rate. The objective of this study was to determine the prevalence of this disease in our center.

Materials and Methods
We carried out a retrospective study, and used medical records of patients with diagnosis of invasive fungal rhinosinusitis in Rhinology Division in Department of Otorhinolaryngology Head and Neck Surgery, Cipto Mangunkusumo General Hospital, Jakarta from January 2013 to October 2018. Characteristics assessed in this study were gender, age, etiology, immune status, antifungal treatments used, debridement before or after antifungal treatment, and whether patients survived or not survived.

Results

- Twelve patients were recruited in this study, 8 were male and 4 were female. The age of patients ranged from 4 months to 59 years with the median age was 31 years.
- Debridement were done before antifungal treatment in 3 cases, antifungal treatments for at least 2 weeks before debridement in 9 cases.
- Four patients died after antifungal treatment without debridement. The causes of death were NK T Cell Lymphoma with chronic liver disease, sepsis with pneumonia and thalassemia, Hemorrhagic Stroke with type 2 diabetes mellitus, and pneumonia with type 1 diabetes mellitus each in one case.

Conclusions
The immunosuppressive state of the host is considered as an important factor in the progression of the disease. At early stage, sinonasal debridement with antifungal medications and successful termination of the immunocompromised state will most likely lead to resolution of the invasive disease.