

Session: P071 Epidemiology of fungal infections II

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### FungiScope - global emerging fungal infection registry

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**Background:** Number of rare invasive fungal diseases (IFD) are rising worldwide due to increasing patient population at risk. To broaden knowledge on epidemiology of emerging IFD, FungiScope a global registry has been initiated. Currently, partners from 64 countries contribute cases that eventually help determining clinical patterns, improve diagnostic procedures and therapeutic regimens.

**Material/methods:** FungiScope uses web-based data capture accessible through [www.fungiscope.net](http://www.fungiscope.net). For case enrollment, cultural, histological or molecular evidence on the occurrence of infection with rare, non-endemic fungi is required. Data collected include demographics, underlying conditions, immunosuppressive medication, clinical signs and symptoms, sites of infection, diagnostics, treatment, and outcome. Clinical isolates are collected for centralized identification, molecular analyses and exchange between collaborators.

**Results:** To date, 547 cases have been included. *Mucoromycotina* (n=245; 44.8%), *Fusarium* spp. (n=80; 14.6%), yeasts (n=72; 13.2%), dematiaceae (n=57; 10.4%) and *Scedosporium* spp. (n=30; 5.5%) are the most frequently registered pathogens. Chemotherapy (n=261; 47.7%) and stem cell transplantation for hematological malignancy (n=130; 23.8%) were the predominant risk factors, followed by intensive care (n=111; 20.3%), Diabetes mellitus (n=96; 17.5%), and chronic renal disease (n=42; 7.6%). For 26 cases (4.7%) no risk factor was identified. Major sites of infection included lung (n=276; 50.5%), paranasal sinuses (n=92; 16.8%), blood stream (n=108; 19.7%), and deep soft tissue (n=84; 15.3%). Disseminated infection (n=186; 34%), including blood stream infections, was mostly associated with lung (n=106; 57%) and CNS involvement (n=34; 18.3%). For 270 (49.4%) patients, complete or partial response to treatment of IFD was documented. All-cause-mortality and mortality attributable to IFD was 47% and 33%, respectively.

**Conclusions:** The clinical relevance and thus the awareness of emerging IFD is increasing. FungiScope is a vividly expanding network that attained increasing interest throughout the years. In a short time period, a wide variety of cases has been collected that provide a comprehensive view on the epidemiology and clinical presentation of rare IFD.