DiFend: An internet register of invasive pulmonary mycosis using the EORTC/MSG definitions for neutropenic patients and HSCT recipients

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Background: Invasive pulmonary mycosis affects many neutropenic patients and recipients of an HSCT but estimates vary because there is no adequate mean of registration.
Methods: We designed and tested an electronic register called DiFend employing the definitions of the EORTC/MSG consensus group (Ascioglu et al *Clin Infect Dis* 2002;34:7-14) to record cases of invasive pulmonary mycoses (IPM) that occurred in each of our 3 hospitals amongst neutropenic patients and HSCT recipients. The database was divided into recruitment of patients who had unexplained fever or were treated empirically with antifungal therapy followed by a second part for entering demographic data. The third part was completed 8 weeks later by entering information about diagnosis, treatment and outcome. The data were entered via Internet Explorer (Microsoft) using a programme created for the purpose by PharmaNetX BV. Demographic data, the basis for defining IPM, any treatment given and the outcome were all recorded remotely without infringing the patient's identity. The project was financially supported by Pfizer BV.
Results: 47 adult cases (30 M:17F; mean age 46.6 yrs range 18-73) all treated for haematological malignancies (28 chemotherapy, 16 SCT, 3 other) have been registered for the pilot phase of which 9 (19%) cases were considered probable IPM, 6 (67%) with a favourable outcome, 20 (43%) possible IPM, 16 (80%) with a favourable outcome and the remainder were not classified.

Invasive pulmonary mycoses	Antifungal therapy	N	Favourable outcome
Probable	Yes	9	6 (67%)
Possible	Yes	13	10 (77%)
	No	7	6 (86%)
Not classified	Yes	7	5 (71%)
	No	11	11 (100%)

Conclusion: The DiFend programme allows online registration of IPM and is sufficiently user friendly and secure to extend to other hospitals interested in determining the incidence of these infections.