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# Invasive pulmonary aspergillosis in the ICU: reply to Wichmann et al.

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#### Dear Editor.

We thank Dr. Wichmann and colleagues for their interesting remarks and discussion on our study [1] and we aim to further clarify their concerns.

Although the diagnosis of invasive pulmonary aspergillosis (IPA) was made before or on the day of ICU admission in three of the five proven IPA patients, IPA diagnosis was made a median of 2 days after H1N1 diagnosis, as stated in the "Results" section of the paper. In none of the nine IPA patients (5 proven, 4 probable) was the diagnosis of IPA established before the diagnosis of H1N1. Moreover, respiratory symptoms, myalgia and fever were present before formal H1N1 diagnosis based on the respiratory sample taken at hospital or ICU admission, suggesting a delay in H1N1 diagnosis. We do acknowledge that the retrospective character of the study does not allow one to confirm a causal relationship and our findings have to be confirmed in larger prospective studies. On the other hand, the incidence of IPA in

solid organ transplant patients is known to be about 0.5 % for kidney and up to 12 % for lung transplants [2–4]. The higher incidence (23 %) found in our study again may suggest that IPA is probably a true H1N1-related superinfection on top of the existing risk for fungal infection associated with a solid organ transplant.

We appreciate Wichmann et al.'s concern that some of the probable IPA cases were merely colonization. The clinical condition of critically ill patients, however, often does not allow invasive diagnostic procedures. However, even if only taking into account the five proven IPA cases, H1N1-related IPA incidence still was much higher than the 1.6–1.8 % reported so far in current literature [5, 6].

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