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Reply

Sir—We read with interest the letter by Tattevin et al. [1] questioning the validity of studies of candidemia epidemiology conducted without the use of selective blood culture bottles for fungus detection.

We fully agree that the detection of fungemia—as performed in most institutions today—is not optimal, and that the use of special methods would certainly improve both the time to and the rate of detection. In vitro and in vivo studies have indeed demonstrated an advantage of special media in favoring yeast growth (particularly that of *Candida glabrata*) or inhibiting concomitant bacteria in blood [2–5]. However, the systematic use of such media is expensive. Their selective use for patients at risk for candidemia is attractive, but this population is difficult to identify. In our institution, the majority of cases of fungemia were detected among patients for whom there was no special request for fungal blood cultures.

Tattevin et al. [1] claim that not using special fungal blood culture media could impede or delay the detection of some non-*albicans* species of *Candida*, such as *C. glabrata*. We have conducted a further analysis of the data published in our 10-year Swiss survey [6] to assess differences in the proportions of *Candida albicans* and non-*albicans* species of *Candida* (particularly *C. glabrata*) reported by the 7 laboratories using special fungal media and the 9 others using standard automated-monitoring blood culture systems. No difference was observed between the 2 groups of institutions nor in the ranking of *Candida* species among the most frequent bloodstream isolates. In addition, in one of the major hospitals participating in our study, use of special fungal blood culture bottles was introduced mid-survey without leading to a higher detection of non-*albicans* species of *Candida* [7].

Time to detection, although very pertinent for patient management, has no influence on studies such as ours, which require only that the incubation time for blood culture is long enough (5–7 days) to allow the detection of almost all *Candida* isolates from blood cultures. In this type of study, the emphasis is on the number of cases of candidemia and not on the number of bottles that yield an isolate nor on the time to detection.

In this respect, it is interesting to note that, as in our report, none of the candidemia studies mentioned in the letter by Tattevin et al. [1] or referenced in our article [6] specify the type of blood culture bottle or system used or the duration of incubation. Moreover, even population-based prospective surveillance studies such as those of Kao et al. [8] and Trick et al. [9] do not mention how candidemia episodes were diagnosed, beyond the basic definition of 1 or more blood culture(s) positive for *Candida* species.

Thus, within the imperfections and variations in current laboratory practices, as well as patient selection, studies of the epidemiology of candidemia do offer useful information and can be compared. Interesting—and intriguing—differences in the incidence of candidemia and the distribution of *Candida* species are reported within and between continents, which should trigger further research regarding their origin.

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Risk Factors for Extrapulmonary Tuberculosis

Sir—We were surprised by the findings of Yang et al. [1] suggesting that female sex and non-Hispanic black race are risk fac-