Reply to the letter to the Editor of Nevez and Le Gal entitled "Caspofungin and *Pneumocystis* pneumonia: it is time to go ahead"

172 words

We thank Nevez and Le Gal for their interest in our work, and to underscore its importance (1). Our results strongly suggest that *Pneumocystis jirovecii* infecting humans is sensitive to caspofungin, like are the *Pneumocystis* species infecting rodents used as models. Thus, we fully agree with Nevez and Le Gal that the usefulness of caspofungin to treat *Pneumocystis* pneumonia should be considered for clinical use. In addition, the sensitivity of *P. jirovecii* to the other echinocandins used clinically will have to be characterized. Indeed, *Saccharomyces cerevisiae* harbors three differentially regulated genes encoding the target of the echinocandins, the catalytic subunit of the 1,3-β-glucan synthase. Despite close homology, these enzymes present drastically distinct sensitivities to the different echinocandins, caspofungin, anidulafungin, and micafungin (1-3). The *Pneumocystis* species infecting rodents proved to be sensitive to the three echinocandins (4, 5). Nevertheless, because the homology between the enzymes of the different *Pneumocystis* species is similar to that between the three *S. cerevisiae* enzymes (1), one cannot exclude that *P. jirovecii* is insensitive to anidulafungin and micafungin.

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