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LETTER TO THE EDITOR

Bacteremia due to *Brevundimonas vesicularis*

To the Editor,

In the original article on *Brevundimonas vesicularis* bacteremia, Zhang et al[1] described the clinical characteristics and microbiological features of 22 patients with primary *B. vesicularis* bacteremia who were being treated in a medical center in southern Taiwan during 2006–2009. In this study, microbiological identification was performed with an API 20 NE system (bioMérieux, Marcy L'etoile, France) or Phoenix-100 automated system (Becton, Dickinson, and Company, Sparks, MD, USA). However, there are some differences between commercial automated identification methods and 16s rRNA gene sequencing, as shown in another case series study conducted in Taiwan.[2] Of the four strains identified as *B. vesicularis* by the Phoenix system, three were finally confirmed as *Brevundimonas nasdae* and one as *Brevundimonas diminuta* by the 16s rRNA gene sequencing. Again, four isolates were identified as *B. diminuta* or *B. vesicularis* by the VITEK 2 system (bioMérieux), which were finally confirmed as *B. nasdae* by 16s rRNA gene sequencing. Therefore, in addition to commercial identification methods, further identification by a molecular method might be necessary. In the same issue, another case series by Shang et al[3] reported 15 patients infected with *B. vesicularis*, including 10 patients with bacteremia. The susceptibility profiles varied for these three case series (Table 1). For the clinical outcomes, a low mortality rate was reported by Zhang et al[1] (22 cases with bacteremia) and Shang et al[3] (10 cases with bacteremia) in patients with *B. vesicularis* bacteremia (3.1%; 1/32), even without an appropriate empiric antibiotic therapy, whereas a higher mortality rate (18.2%; 4/22) was reported by Lee et al.[2] Therefore, further investigation is required to establish the effective therapeutic strategy for invasive infections and bacteremia.

Table 1 *In vitro* antimicrobial susceptibility rates of bacteremic *Brevundimonas* isolates from three cases ($N = 59$)

	Percentage of isolates susceptible to indicated agent		
	Zhang et al[1] ($n = 22$)	Lee et al[2,a] ($n = 30$)	Shang et al[3,b] ($n = 7$)
Ceftazidime	63.6	100	42.9
Cefepime	NA	27	66.6
Cefpirome	90.9	NA	NA
Amikacin	86.4	100	100
Piperacillin/tazobactam	90.9	100	100
Ciprofloxacin	86.4	0	33.3
TMP/SMZ	59.1	NA	100

NA = not available; TMP/SMZ = trimethoprim–sulfamethoxazole.
[a] Blood isolates of *Brevundimonas* species.
[b] Several isolates from blood without susceptibility data were available in this case series.

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