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Title: Description of a novel mutation in the *atpC* gene in optochin-resistant *streptococcus pneumoniae* strains isolates from Tunisia

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ACCEPTED MANUSCRIPT

1	Description of a novel mutation in the atpC gene in Optochin-resistant Streptococcus
2	pneumoniae strains isolates from Tunisia
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10	
11	Highlights:
12	• Absence of clonal expansion of optochin resistant strains.
13	• Each optochin resistant strain showed that only the <i>atpC</i> gene was modified.
14	• Novel mutation 15 (Val→Ile substitution) in H ⁺ -ATPase c-subunit with was detected.
15	
16	Abstract
17	The identification of <i>Streptocooccus pneumoniae</i> among other α-hemolytic streptococci is
18	based on phenotypic or genotypic characteristics as colony morphology, bile solubility and
19	optochin susceptibility. We report in this study three optochin-resistant S. pneumoniae
20	isolated from immunocompromised patients in Tunisia. The three isolates were positive for
21	bile solubility test. The biochemical identification with API® 20 Strep was not discriminatory
22	for two strains. The three strains had different serotypes (6C, 19F and 23F) and three different

sequence types (ST386, ST320, and ST326). The sequencing of atpA and atpC genes for each

strain showed only modification in atpC gene. In two strains, mutation in 13 (Met \rightarrow Val) or

23

24

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