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## '*Olegusella massiliensis*' strain KHD7, a new bacterial genus isolated from the female genital tract

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### Abstract

We report the main characteristics of '*Olegusella massiliensis*' gen. nov., sp. nov., strain KHD7 (= CSUR P2268 = DSM 101849), a new member of the Coriobacteriaceae family isolated from the vaginal flora of a patient with bacterial vaginosis.

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As part of the ongoing microbial culturomics study of the human microbiota in our laboratory [1], we studied the diversity of the vaginal microorganisms of patients with bacterial vaginosis. In Hospital Nord, Marseille, France, we isolated from a vaginal sample of a 33-year-old French woman a new member of the Coriobacteriaceae family that could not be identified by matrix-assisted laser desorption-ionization time-of-flight mass spectrometry (MALDI-TOF MS) using a Microflex spectrometer (Bruker Daltonics, Leipzig, Germany). The study was authorized by the local ethics committee of the IFR48 (Marseille, France) under agreement 09-022, and the patient provided written informed consent.

Strain KHD7 was first isolated in November 2015 after 48-hour incubation under anaerobic conditions at 37°C on 5% sheep's blood-enriched CNA agar (BD Diagnostics, Le pont de

Claix, France) after 10-day preincubation in a blood culture bottle enriched with rumen that was filter sterilized through a 0.2 µm pore filter (Thermo Fisher Scientific, Villebon sur Yvette, France) and sheep's blood. Colonies were pale white and translucent and had a diameter of 1 to 1.2 mm. Bacterial cells were Gram-positive, nonmotile and non-spore-forming coccobacilli with a mean diameter of 0.35 µm and a mean length of 0.42 µm. Strain KHD7 is strictly anaerobic and has no catalase and oxidase activities.

The 16S rRNA gene amplification was done using the primer pair fD1-rp2 as previously described [2], using a 3130-XL sequencer (Applied Biosciences, Saint Aubin, France). Strain KHD7 exhibited the highest 16S rRNA sequence identity of 93.5% with *Olsenella uli* strain DSM 7084<sup>T</sup> (GenBank accession no. NR\_074414), the phylogenetically closest species with a validly published name (Fig. 1). This value was lower than the 95% 16S rRNA gene sequence threshold proposed by Stackebrandt and Ebers [3] to define a new genus without carrying out DNA-DNA hybridization, and it classifies strain KHD7 as the representative strain of a new genus within the Coriobacteriaceae family in the phylum Actinobacteria [4]. *Olsenella uli* [5] was isolated from human gingival crevices [5]. It is a Gram-positive, strictly anaerobic, nonmotile and non-endospore-forming bacillus, with no catalase or oxidase activity. *Olegusella umbonata*, another closely related anaerobic



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