P. acnes is known as a Gram-positive bacterium constituting a significant part of the human skin microbiota (1). Its natural habitat is mainly the lipid-rich sebaceous glands (2, 3). Acne vulgaris is a common chronic skin disease and is usually associated with the detection of this organism. Moreover, P. acnes is more frequently identified in device-related infections (4, 5), producing biofilm in this context (6). Recently, this species has been subdivided into several phylogenetic types that were subsequently afforded subspecies status (7).

We present here the genome sequence of Propionibacterium namnetense NTS 31307302T isolated at Nantes University Hospital, France, during a bone infection (8). The isolate showed beta-hemolysis on a blood agar plate and was recently described as being related to P. acnes (9). Strain NTS 31307302T is resistant to rifampin, as it has been already reported for other P. acnes isolates (10) or clinical strains of P. acnes (11), producing biofilm in this context (6). Recently, this species has been subdivided into several phylogenetic types that were subsequently afforded subspecies status (7).

P. namnetense NTS 31307302T was grown overnight at 37°C on a Schaedler agar plate (Oxoid, United Kingdom) under anaerobic atmosphere. Genomic DNA was extracted using a DNeasy blood and tissue kit (Qiagen GmbH, Germany), according to the provider’s recommendation. A paired-end library was prepared with the NEBNext Ultra DNA library prep kit for Illumina (NEB) provider’s recommendation. A paired-end library was prepared with the NEBNext Ultra DNA library prep kit for Illumina (NEB). 2,846,458 reads were assembled into 24 contigs (15 of them >1 kb) with an average coverage of 127×. Contig reordering and annotation were performed with Mauve 2.3.1 (12) and the NCBI Prokaryotic Genome Automatic Annotation Pipeline (PGAAP) (13), respectively. Average nucleotide identities (ANI) were calculated using Oat 0.91 (14).

The final assembly has a total length of 2,369,664 bp, an N50 of 626 kb, and a G+C content of 60.5%. About 2,136 coding sequences (CDSs), 46 tRNAs, 84 pseudogenes, three rRNAs, and three noncoding RNAs were revealed by annotation.

To determine genomic differences between P. namnetense NTS 31307302T and the closely related P. acnes KPA171202, ATCC 11828, and ATCC 6919T, we performed a genomic comparison. The draft genome size of the newly sequenced strain is 2.37 Mb, which is 5.02 to 9.81% smaller than P. acnes reference strains. The ANI value was 88.5%. Interestingly, our strain showed an ANI value of 99.52% with P. acnes SK182B-JCVI (accession no. AFU00000000.1), recovered during the Human Microbiome Project, which is significantly above the cutoff value of 95% for species delineation (14). Therefore, this strain is likely to be another isolate of this species. Comparing both sequences of the rpoB gene, we observed only one point mutation at nucleotide 1319 (G→A) in strain NTS 31307302T leading to an amino acid modification at position 440 (R440H), previously described to be involved in rifampin resistance in P. acnes (11).

This draft genome of P. namnetense NTS 31307302T will be used for studying virulence factors associated with bone infection, especially hemolysin, lipase, or hyaluronidase (15).

Accession number(s). The draft sequence of P. namnetense NTS 31307302T studied in this project has been deposited at DDBJ/EMBL/GenBank under the accession no. LWHO01000001. The version described in this paper is LWHO01000001.1.

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REFERENCES


