



ELSEVIER

Contents lists available at ScienceDirect

Data in Brief

journal homepage: www.elsevier.com/locate/dib



Data article

Dataset of mitochondrial genome variants in oncocytic tumors

Lihua Lyu ^a, Qiufeng Wang ^a, Shujie Song ^a, Huaibin Zhou ^a,
Ming Li ^a, Chen Zhou ^a, Zhiying Jiang ^a, Liyan Li ^c, Jianxin Lyu ^a,
Guorong Chen ^c, Yidong Bai ^{a,b,*}

^a School of Laboratory Medicine and Life Sciences, Key Laboratory of Laboratory Medicine, Ministry of Education, Zhejiang Provincial Key Laboratory of Medical Genetics, Wenzhou Medical University, Wenzhou 325035, Zhejiang, China

^b Department of Cellular and Structural Biology, University of Texas Health Science Center at San Antonio, San Antonio, TX 78229, USA

^c Department of Pathology, the First Affiliated Hospital of Wenzhou Medical University, Wenzhou 325000, China

ARTICLE INFO

Article history:

Received 25 January 2018

Received in revised form

31 January 2018

Accepted 12 February 2018

Available online 16 February 2018

ABSTRACT

This dataset presents the mitochondrial genome variants associated with oncocytic tumors. These data were obtained by Sanger sequencing of the whole mitochondrial genomes of oncocytic tumors and the adjacent normal tissues from 32 patients. The mtDNA variants are identified after compared with the revised Cambridge sequence, excluding those defining haplogroups of our patients. The pathogenic prediction for the novel missense variants found in this study was performed with the Mitimpact 2 program.

© 2018 Published by Elsevier Inc. This is an open access article under the CC BY license

(<http://creativecommons.org/licenses/by/4.0/>).

DOI of original article: <https://doi.org/10.1016/j.mito.2018.01.008>

* Corresponding author at: School of Laboratory Medicine and Life Sciences, Key Laboratory of Laboratory Medicine, Ministry of Education, Zhejiang Provincial Key Laboratory of Medical Genetics, Wenzhou Medical University, Wenzhou 325035, Zhejiang, China.

E-mail address: baiy@uthscsa.edu (Y. Bai).

<https://doi.org/10.1016/j.dib.2018.02.040>

2352-3409/© 2018 Published by Elsevier Inc. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

Specifications table

Subject area	<i>Genetics</i>
More specific subject area	<i>Oncocytic tumors</i>
Type of data	<i>Table, text file</i>
How data was acquired	<i>Sanger sequencing of whole mitochondrial genomes</i>
Data format	<i>Analyzed</i>
Experimental factors	<i>Samples are paraffin-bedded tissues</i>
Experimental features	<i>The whole mitochondrial genomes from the tumor tissues were sequenced, the variations were identified by comparing sequences with the revised Cambridge sequence (rCRS) (GenBank number NC_012920); the predictions for pathogenicity of mtDNA variants were established according to the MitImpact 2 program.</i>
Data source location	<i>Wenzhou, China</i>
Data accessibility	<i>The data are available with this article</i>

Value of the data

- The data identified inherited mtDNA variants associated with patients with oncocytic tumors.
- The data showed some identified mtDNA variants could have functional consequences.
- The data might help to detect new genetic predisposition markers for oncocytomas.

1. Data

The data were presented as tables, where positions, detail changes (Table 1), and the implications were provided (Table 2).

2. Experimental design, materials and methods

We collected 32 cases of the paraffin-bedded tissues with oncocytic tumor and matched adjacent normal tissues, mtDNA were amplified by PCR using 24 previously reported pairs of mtDNA primers to cover the whole mtDNA genome as our previous work [1]. MtDNA variants were yielded by comparing sequencing results of the complete mitochondrial genome with the revised Cambridge sequence (rCRS) (GenBank number NC_012920). The heteroplasmy were defined if a double peaks of two residues were verified at the same position in the electro-chromatograms. Pathogenic prediction were analyzed using PolyPhen2 (<http://genetics.bwh.harvard.edu/pph2/>) [2] and MitImpact 2 [3].

Download English Version:

<https://daneshyari.com/en/article/6596940>

Download Persian Version:

<https://daneshyari.com/article/6596940>

[Daneshyari.com](https://daneshyari.com)