

Accepted Manuscript

Integrating RNA sequencing into neuro-oncology practice

David S. Rogawski, Nicholas A. Vitanza, Angela C. Gauthier, Vijay Ramaswamy, Carl Koschmann



PII: S1931-5244(17)30229-3

DOI: [10.1016/j.trsl.2017.06.013](https://doi.org/10.1016/j.trsl.2017.06.013)

Reference: TRSL 1170

To appear in: *Translational Research*

Received Date: 31 March 2017

Revised Date: 27 May 2017

Accepted Date: 30 June 2017

Please cite this article as: Rogawski DS, Vitanza NA, Gauthier AC, Ramaswamy V, Koschmann C, Integrating RNA sequencing into neuro-oncology practice, *Translational Research* (2017), doi: 10.1016/j.trsl.2017.06.013.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Integrating RNA sequencing into neuro-oncology practice

Authors: David S. Rogawski^a, Nicholas A. Vitanza^b, Angela C. Gauthier^c, Vijay Ramaswamy^d, and Carl Koschmann^{a*}

Affiliations: ^aDepartment of Pediatrics, University of Michigan School of Medicine, Ann Arbor, MI 48109, USA; ^bDepartment of Pediatrics, Seattle Children's Hospital, Seattle, WA 98105, USA; ^cYale School of Medicine, 333 Cedar Street, New Haven, CT 06510; ^dDivision of Haematology/Oncology, Department of Pediatrics, Hospital for Sick Children, Toronto, ON, M5G 1X8, Canada

***Correspondence to:**

Carl Koschmann, M.D.
Assistant Professor/Pediatric Neuro-Oncology
Division of Pediatric Hematology-Oncology
University of Michigan
CS Mott Children's Hospital Floor 7
1540 E Hospital Dr SPC 4257
Ann Arbor, MI 48109, USA
ckoschma@med.umich.edu
Phone: +1-734-936-9814
Fax: +1-734-615-0464

Running Head: Integrating RNA-seq into neuro-oncology

Abbreviations: CNS = central nervous system; RNA-seq = RNA sequencing; qRT-PCR = quantitative reverse transcription polymerase chain reaction; NGS = next generation sequencing; GBM = glioblastoma; SNPs = single nucleotide polymorphisms; exRNAs = extracellular RNAs; lncRNAs = long non-coding RNAs; miRNAs = microRNAs; CNS-PNET = primitive neuroectodermal tumors of the CNS; CNS NB-FOXR2 = CNS neuroblastoma with FOXR2 activation; CNS EFT-CIC = CNS Ewing sarcoma family tumor with CIC alteration; CNS HGNET-MN1 = CNS high-grade neuroepithelial tumor with MN1 alteration; CNS HGNET-BCOR = CNS high-grade neuroepithelial tumor with BCOR alteration; ATRT = atypical teratoid rhabdoid tumors; CIMP = CpG island methylator phenotype; RTK = receptor tyrosine kinase; ADME = absorption, distribution, metabolism and excretion; GSEA = Gene Set Enrichment Analysis; ssGSEA = single-sample Gene Set Enrichment Analysis; IGSA = Individual Gene Sets Analysis; CSC = cancer stem cells

Keywords: 1) RNA sequencing 2) Brain tumor; 3) Neuro-Oncology 4) Precision Medicine; 5) Microarray; 6) Nanostring

Download English Version:

<https://daneshyari.com/en/article/8769066>

Download Persian Version:

<https://daneshyari.com/article/8769066>

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