**Title:** COMPOSITIONS AND METHODS FOR IDENTIFYING B CELL MALIGNANCIES RESPONSIVE TO B CELL DEPLETING THERAPY

**Abstract:** The invention provides compositions and methods featuring the use of miR-629 for identifying subjects responsive to B-cell depleting therapies (e.g., treatment with an anti-CD19 antibody). In other embodiments, the invention features the use of miR-629 to identify subjects as having a B cell malignancy.
Date of publication of the international search report:
26 November 2015
### INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

**IPC(8) -**
- C12Q 1/68; G01N 33/574; C12N 15/09 (2015.01)

**CPC -**
- C12Q 2600/176; 1/6866, 2600/158, 1/6883; G01N 33/57484

According to International Patent Classification (IPC) or to both national classification and IPC.

### B. FIELDS SEARCHED

**Minimum documentation searched (classification system followed by classification symbols)**

- CPC: C12Q 2600/176, 1/6866, 2600/158; G01N 33/57484

**Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched**

Electronic database consulted during the international search (name of data base and, where practicable, search terms used):
- PatSeer (US, EP, WO, DE, GB, CN, FR, KR, ES, AU, IN, CA, INPADOC Data); Google; Google Scholar; EBSCO; PubMed;
- 'miR-629,' 'caner,' 'B-Cell,' 'CD19,' antibody, primer, 'B-cell lymphoma'

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 2010/0173288 A1 (ZHANG, C &amp; al.) July 6, 2010; abstract; Claim 30</td>
<td>22</td>
</tr>
<tr>
<td>Y</td>
<td>HATZIAPOSTOLOU, M et al. An HNF4alpha-miRNA Inflammatory Feedback Circuit Regulates Hepatocellular Oncogenesis. Cell. 09 December 2011. Vol. 147, No. 6, pp 1233-1247; page 1236, Figure 2F; page 1236, left column, first paragraph; doi: 10.1016/j.cell.2011.10.043</td>
<td>24-29</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C. See patent family annex.

### Date of the actual completion of the international search

18 May 2015 (18.05.2015)

### Date of mailing of the international search report

**17 JUN 2015**

### Name and mailing address of the ISA/

- Mail Stop PCT, Attn: ISA-US, Commissioner for Patents
- P.O. Box 1450, Alexandria, Virginia 22313-1450
- Facsimile No. 571-273-8300

### Authorized officer

Shane Thomas

- PCT Helpdesk: 571-272-4300
- PCT OS: 571-272-7774

Form PCT/ISA/210 (second sheet) (January 2015)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. □ Claims Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. □ Claims Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. × Claims Nos.: 10-21
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

This International Searching Authority found multiple inventions in this international application, as follows:

1. □ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. □ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. □ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. □ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 

Remark on Protest  □ The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee.
□ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
□ No protest accompanied the payment of additional search fees.