

# TEAM READGOOD

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*AI Genomics hackathon*  
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These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

# INTRODUCTION

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- We mined the Internet (academic sources and general news) to find as many papers with treatment options as possible for neurofibromatosis 2 (NF2).

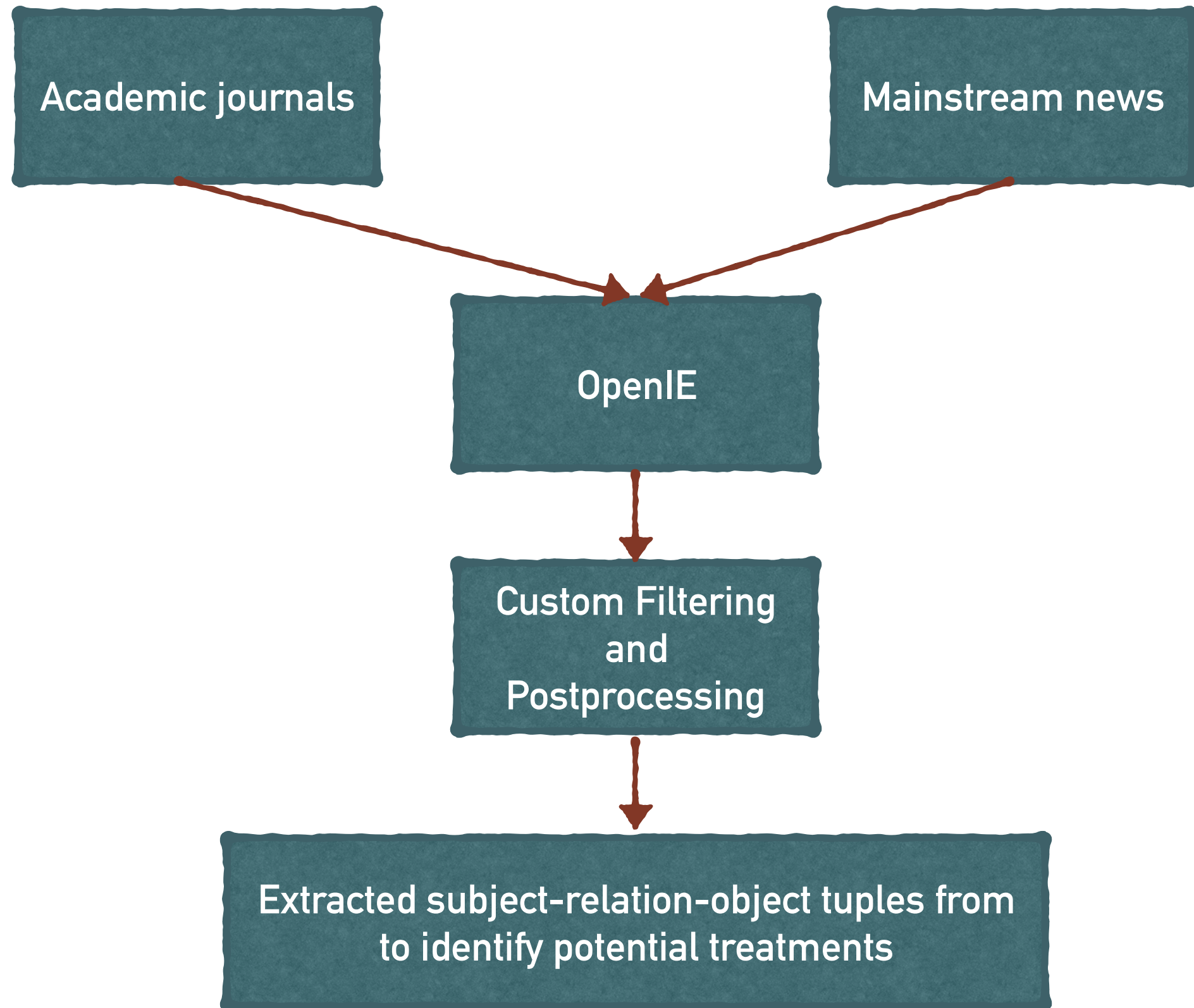
# PURPOSE

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- The purpose is to provide NF2 patients like Onno with a wide variety of treatment option.
- Specifically, we are looking for treatment options that could potentially help slow or stop tumor growth rather than just deal with the side effects of NF2.

# APPROACH

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# METHODS/ALGORITHMS/MODELS

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- Data sourcing (IrisAI, EDirectCookbook, web crawling w/ Google)
- Data cleansing/transformation (conversion to plain text)
- Application of OpenIE algorithms, which extract relation triples (subject-relation-object of relation), with additional file pipeline, filtering, and file writing modifications
- Selection of top candidates

*http://bit.ly/ReadGood\_results*

3 lines (2 sloc) | 211 Bytes

Raw

Blame

History

Search this file...

1	Conditions	Treatment	Results	Evidence
2	Human schwannoma	treat with Ponatinib	decreases viability of merlin-deficient HSC and vestibular schwannoma (VS) cells	<a href="https://www.ncbi.nlm.nih.gov/pmc/a">https://www.ncbi.nlm.nih.gov/pmc/a</a>

# RESULTS

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*Searchable database of conditions, treatments, results, and evidence*

# FUTURE CONSIDERATIONS

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- Human-in-the-loop verification of results
- Weighting triples by citation or some other factor
- More robust filtering
- Wider data sourcing
- More clinically-oriented NLP engine (Nuance CLU) that allows for better entity recognition, POS-tagging, etc.



**HTTP://BIT.LY/  
READGOOD\_RESULTS**