94 unique fusions 20 NTRK as 5' partner

8 curation errors

Remove	Note
NTRK1-LMNA*	Data entry error
NTRK1-NFASC*	Data entry error
NTRK1-TFG*	Data entry error
NTRK1-TPR*	Data entry error
NTRK2-SPECC1L*	Data entry error
NTRK3-TFG*	Data entry error
NTRK1-Fc	Recombinant
NTRK1-CD5	Unlisted

12 properly curated

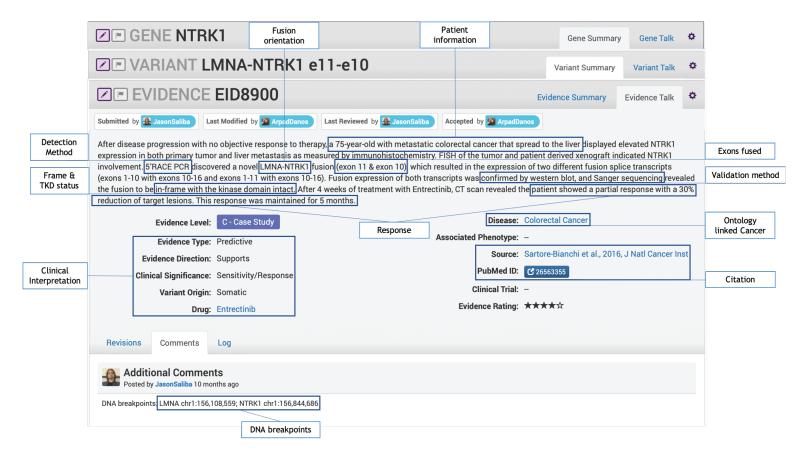
Кеер	Note
NTRK1-TPM3*	w/ Reciprocal
NTRK2-AFAP1*	w/ Reciprocal
NTRK3-ETV6*	w/ Reciprocal
NTRK3-RBPMS*	w/ Reciprocal
NTRK1-DYNC2H1	w/o Reciprocal
NTRK2-LAP3	w/o Reciprocal
NTRK2-RASEF^	w/o Reciprocal
NTRK3-LOXL2	w/o Reciprocal
NTRK3-PEAK1^	w/o Reciprocal
NTRK3-SCAPER^	w/o Reciprocal
NTRK3-ACTR8	w/o Reciprocal
NTRK3-SLC8B1	w/o Reciprocal

^{* =} reciprocal contained in main list

Supplemental Figure 1: Analysis of 5' NTRK fusions found in public fusion databases. 94 unique NTRK fusions were collected from public fusion databases. 20/94 listed an NTRK as the 5' fusion partner. Manual vetting of each manuscript determined 8/20 were curation errors as 6/8 were listed with NTRK as the 3' partner in the paper, but were curated into the database in the reverse orientation. NTRK1-Fc was a recombinantly created protein for experimental purposes and therefore not found in a patient. NTRK1-CD5 was not found within the cited manuscript and was entered into the fusion database in error. 12/20 5' NTRK fusions were found in their cited papers, with 4/12 also having their reciprocal fusion listed. Additionally, 3/8 5'NTRK fusions reported without reciprocal fusions were likley the result of an intrachromosomal deletion.

^{^ =} result of intrachromosomal deletion

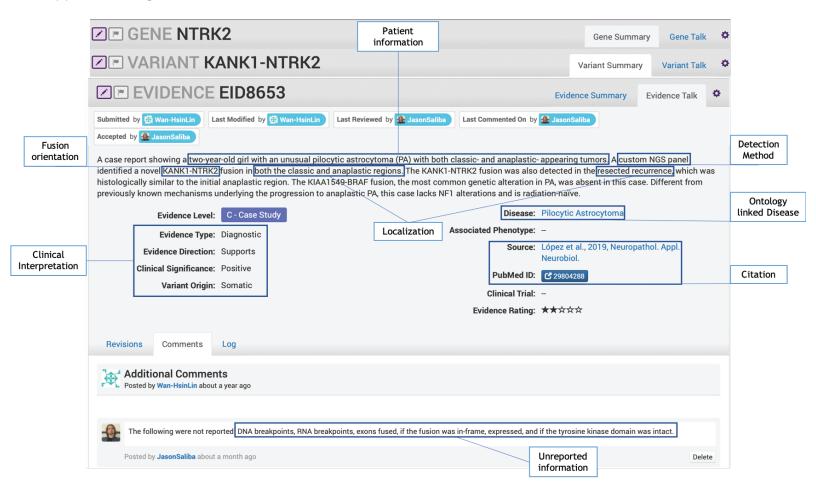
Supplemental Figure 2



Supplemental Figure 2: Screenshot of CIViC Evidence Item 8900 - LMNA-NTRK1. This evidence item was created from data curated from a published manuscript (PMID:26563355) desribing a 75 year-old Colorectal Cancer patient found to harbor a LMNA-NTRK1 fusion who responded postively to Entrectinib therapy. Structured fields like the Ontology linked Disease field, Source and PubMed ID fields, and those fields relevant to a clinical interpretation are highlighted. Additionally, information in the Evidence statement relevant to the NTRK fusions SC-VCEP evaluation process describing fusion orientation, exons fused, fusion frame and tyrosine kinase domain (TKD) status, detection and validation methods, patient information, and patient response are highlighted as well. Finally, any breakpoints are listed in the Comments of the Evidence Item.

https://civicdb.org/events/genes/3983/summary/variants/3225/summary/evidence/8900/summary#evidence

Supplemental Figure 3



Supplemental Figure 3: Screenshot of CIViC Evidence Item 8653 - KANK1-NTRK2. This evidence item was created from data curated from a published manuscript (PMID:29804288) desribing a 2 year-old Pilocytic Astrocytoma patient found to harbor a KANK1-NTRK2 fusion. Structured fields like the Ontology linked Disease field, Source and PubMed ID fields, and those fields relevant to a clinical interpretation are highlighted. Additionally, information in the Evidence statement relevant to the NTRK fusions SC-VCEP evaluation process describing fusion orientation, detection method, patient information and patient response are highlighted as well. Finally, in the Comments of the Evidence Item, special notation is made that several evaluation parameters are not reported in the manuscript this evidence was curated from.

https://civicdb.org/events/genes/3984/summary/variants/3158/summary/evidence/8653/summary#evidence