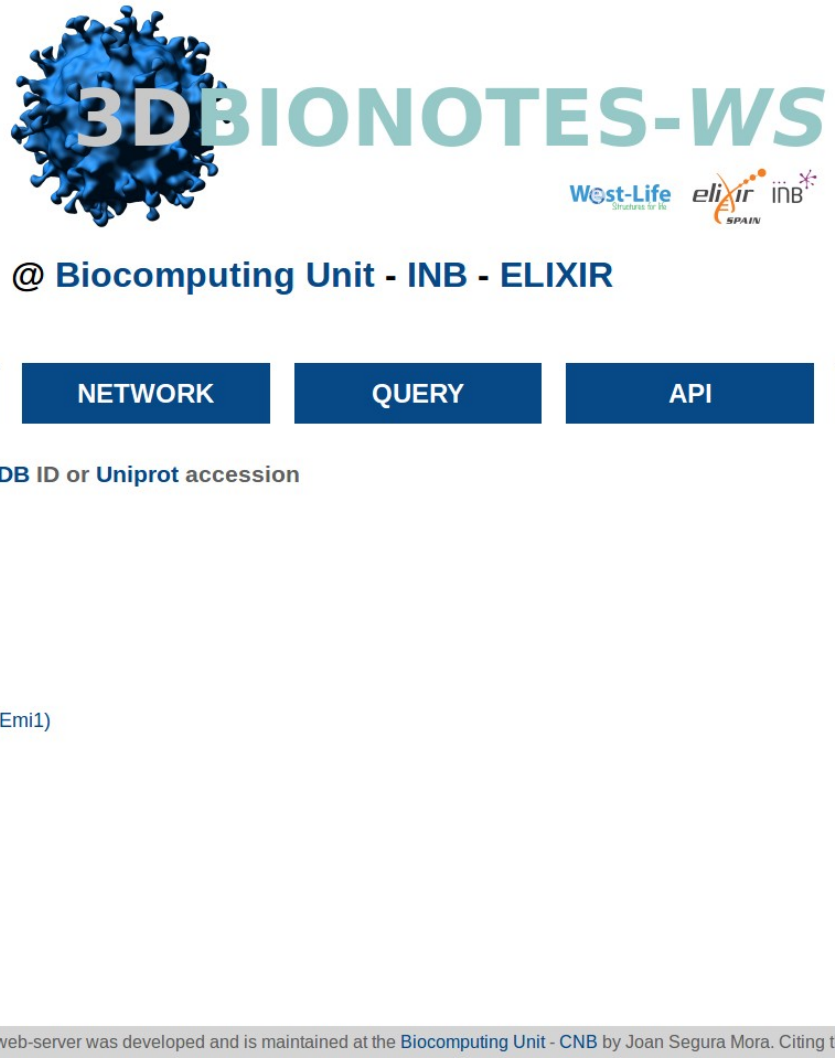


(A)

In this example we will show how to submit your own annotations. In any type of 3DBIONOTES query custom annotations including variants or continuous data can be uploaded using the file filed in the web form (A). All viewers and analysis tools will also process the attached data.

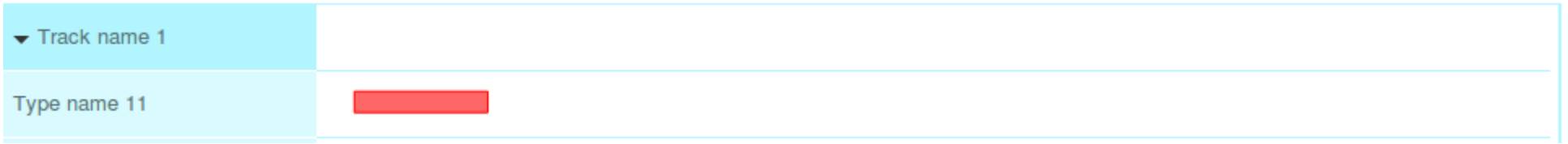
The JSON format file is used to submit annotation to 3DBIONOTES. The file contains an array of annotations

[ann_1, ann_2, … , ann_n]

Where a particular annotation should contain next keys

```
ann_1 = {
    "track_name":"track_name_1",
    "acc":"P01112", ← The annotations are located in any protein with UniProt accession P01112
    "data":[
      {"begin":5,"end":25,"type":"type_name_11","color":"red","description":"My description text"}
    ] ← Array data
}
```

If [ann_1] is uploaded when requesting the information for PDB entry 4G3X the protein annotation panel will display the track

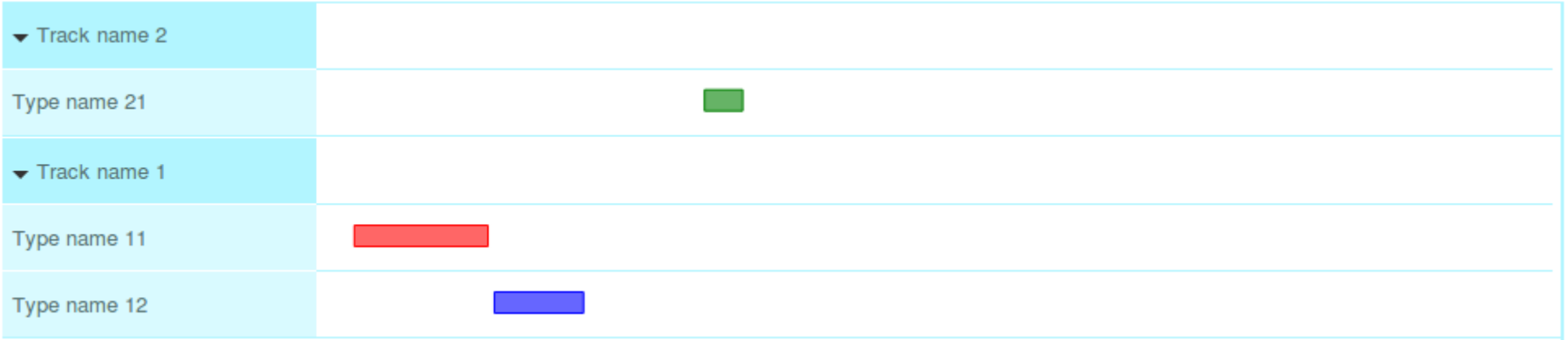


```
[{
    "track_name":"track_name_1",
    "acc":"P01112", ← The annotations are located in any protein with UniProt accession P01112
    "data":[
      {"begin":5,"end":25,"type":"type_name_11","color":"red","description":"My description text"},
      {"begin":27,"end":40,"type":"type_name_12","color":"blue","description":"My description text"}
    ]
}]
```


If this json is uploaded when requesting the information for PDB entry 4G3X the protein annotation panel will display the track

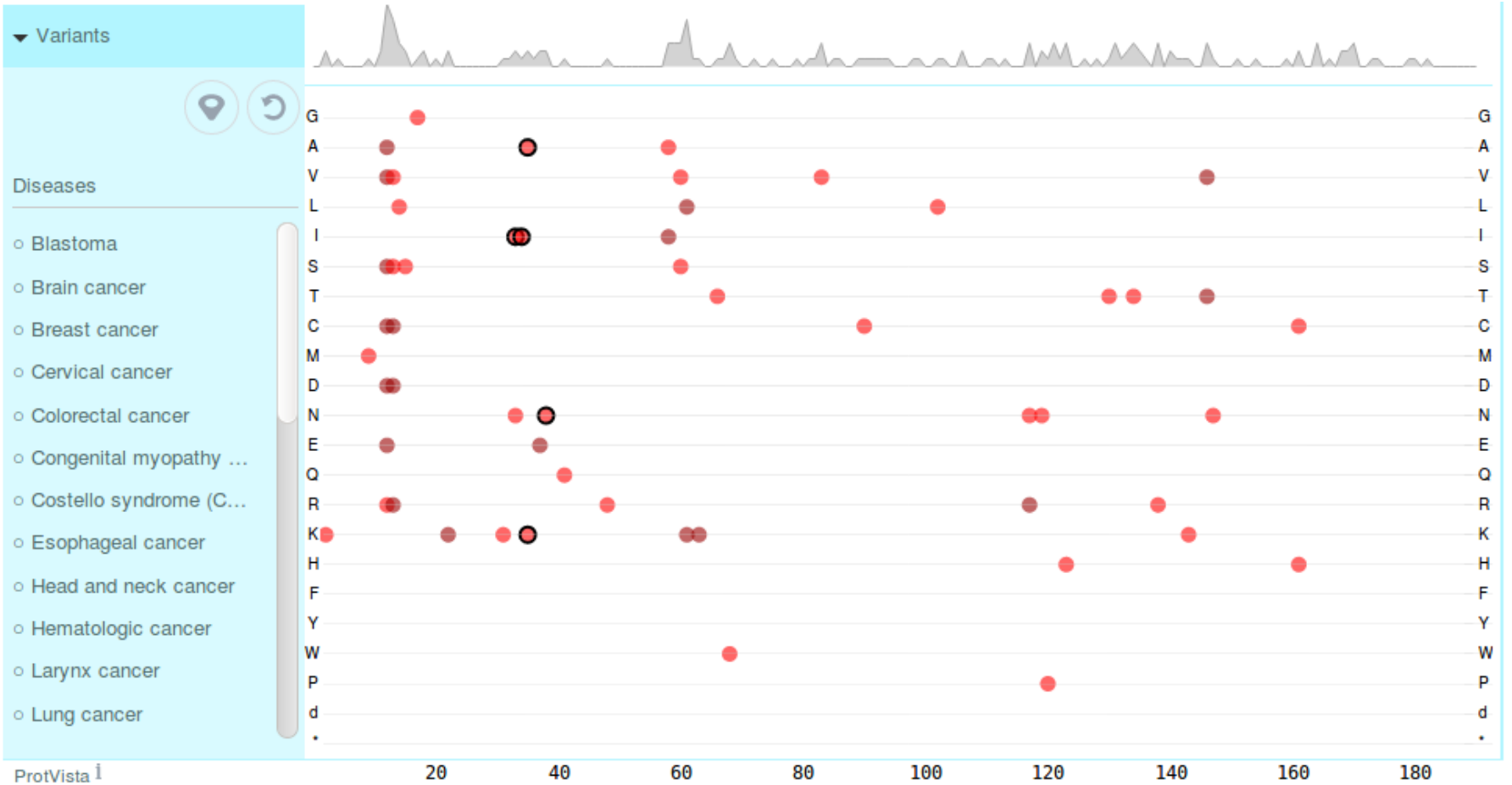
```
[{
    "track_name":"track_name_1",
    "acc":"P01112", ← The annotations are located in any protein with UniProt accession P01112
    "data":[
      {"begin":5,"end":25,"type":"type_name_11","color":"red","description":"My description text"},
      {"begin":27,"end":40,"type":"type_name_12","color":"blue","description":"My description text"}
    ]
},{
    "track_name":"track_name_2",
    "chain":"A",← The annotations are located in PDB chain A
    "data":[
      {"begin":60,"end":65,"type":"type_name_21","color":"green","description":"My description text"}
    ]
}]
```

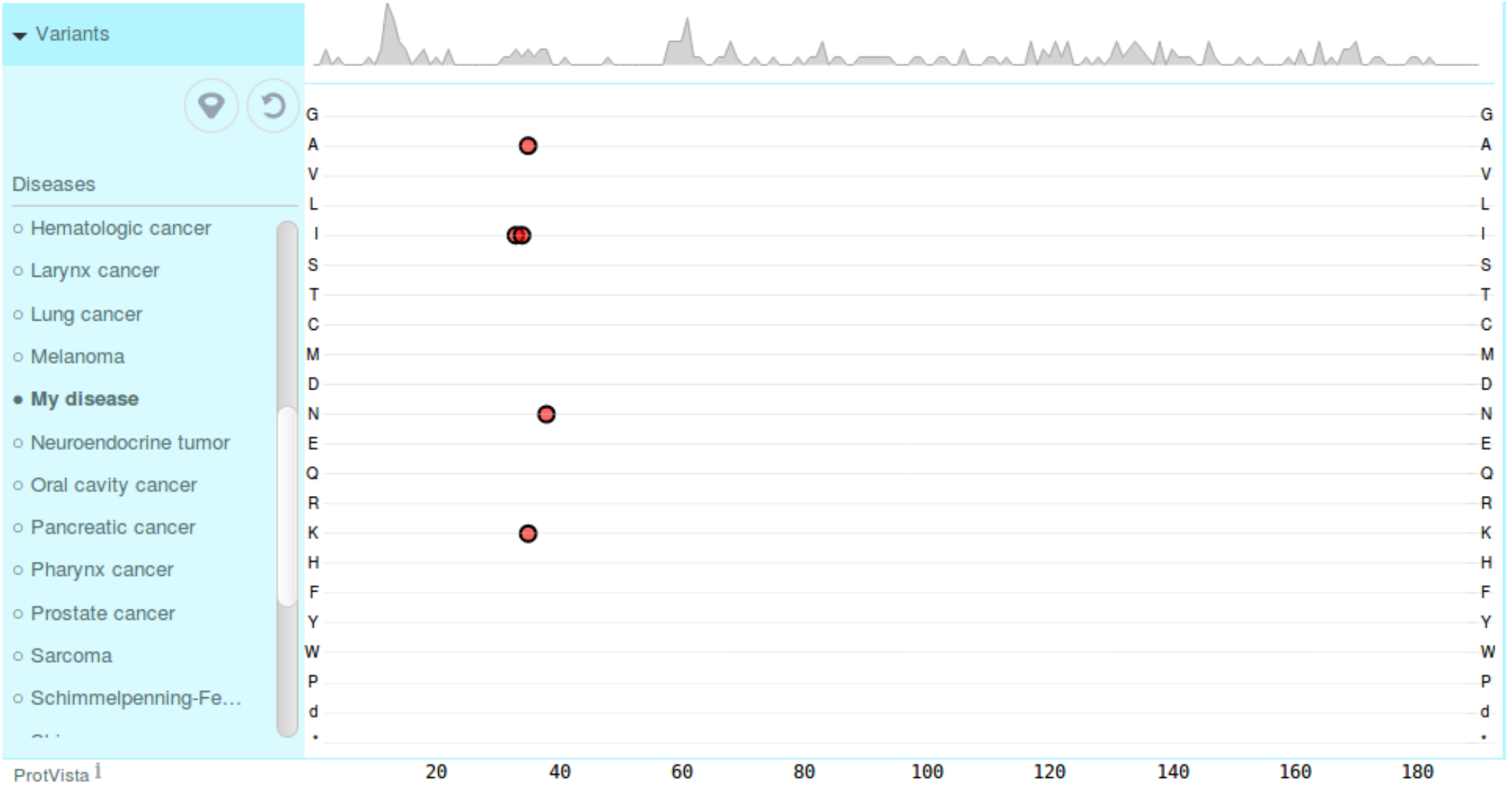

If this json is uploaded when requesting the information for PDB entry 4G3X the protein annotation panel will display the track



```
[{
    "track_name":"track_variants",
    "acc":"P01112",
    "visualization_type":"variants", ← Indicates that annotations are genomic variants
    "data":[
      {"begin":33,"variation":"I","wildtype":"D","disease":"my disease"},
      {"begin":34,"variation":"I","wildtype":"P","disease":"my disease"},
      {"begin":35,"variation":"A","wildtype":"T","disease":"my disease"},
      {"begin":35,"variation":"K","wildtype":"T","disease":"my disease"},
      {"begin":38,"variation":"N","wildtype":"D","disease":"my disease"}
    ]
}]
```


If this json is uploaded when requesting the information for PDB entry 4G3X the protein annotation variant panel will display the submitted variants and highlight them with a black border (see next slide)

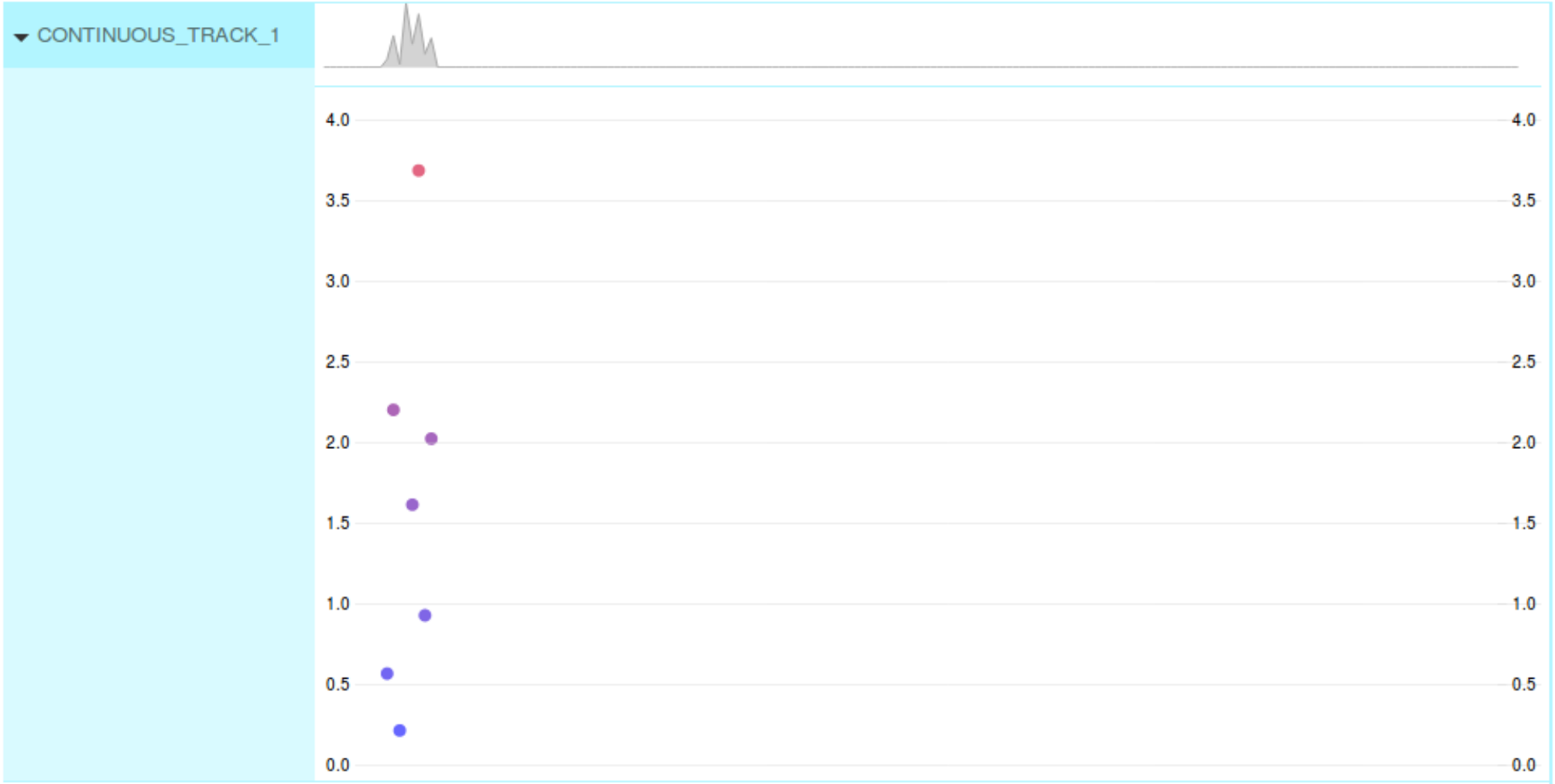



Variants
Diseases
Hematologic cancer
Larynx cancer
Lung cancer
Melanoma
My disease
Neuroendocrine tumor
Oral cavity cancer
Pancreatic cancer
Pharynx cancer
Prostate cancer
Sarcoma
Schimmelpenning-Fe…
G A V L I S T C M D N E Q R K H F Y W P d *
20 40 60 80 100 120 140 160 180
ProtVista

Continuous data can be also submitted, next slide shows how this data is displayed when submitted with the PDB entry 4G3X


```
[{
    "track_name":"continuous_track_1",
    "visualization_type":"continuous",
    "chain":"A",
    "data":[
        {"begin":10,"value":0.567099895929477},
        {"begin":11,"value":2.20246376282134},
        {"begin":12,"value":0.214324032613771},
        {"begin":13,"value":4.46020393560932},
        {"begin":14,"value":1.61429623438872},
        {"begin":15,"value":3.68651815100741},
        {"begin":16,"value":0.928219087174238},
        {"begin":17,"value":2.02385708943023} ]
}]
```


← Indicates that data must be displayed in a continuous viewer


CONTINUOUS_TRACK_1
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0