|  |
| --- |
| **Patient Data** |
| **Patient** {{ patient\_lastname }} {{ patient\_firstname }} |
| **Birthdate** {{ patient\_dateofbirth }} |
| **Diagnosis** {{ diagnosis }} |

|  |  |
| --- | --- |
| Mutation load {{ mutation\_load }} | Number of non-synonymous SNVs {{ num\_nonsynonymous }} |
| Number of oncogenes {{ num\_oncogene }} | |
| Number of tumor suppressor genes {{ num\_tsg }} | |
| Additional information {{ additional\_information }} | |

{% if tag == “SNV” %}

| **Somatic Mutations in Known Driver Genes** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| List of cancer driver genes along with the mutations observed in the patient. Confidence column shows the number of the driver gene sources that catalogued the corresponding gene as driver and Reference column gives the list of those sources. | | | | | | |
| **Gene** | **Mutation** | **Consequence** | **Driver Type** | **Tumor Type** | **VAF** | **References** |
| {%tr for item in driver\_table %} |  |  |  |  |  |  |
| {{ item.gene }} | {{ item.one\_letter\_repr }} | {{ item.Consequence }} | {{ item.driver\_role }} | {{ item.tumor\_list }} | {{ item.vaf }} | {{ item.ref\_map }} |
|  |  |  |  |  |  | {%tr endfor %} |

{% elif tag == “CNV” %}

| **Somatic Mutations in Known Driver Genes** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| List of cancer driver genes along with the mutations observed in the patient. Confidence column shows the number of the driver gene sources that catalogued the corresponding gene as driver and Reference column gives the list of those sources. | | | | | | |
| **Gene** | **Mutation** | **Consequence** | **Driver Type** | **Tumor Type** | **Copy Number** | **References** |
| {%tr for item in driver\_table %} |  |  |  |  |  |  |
| {{ item.gene }} | {{ item.type }} | {{ item.effect }} | {{ item.driver\_role }} | {{ item.tumor\_list }} | {{ item.copy\_number }} | {{ item.ref\_map }} |
|  |  |  |  |  |  | {%tr endfor %} |

{% endif %}

| **Somatic Mutations with Known Pharmacogenetic Effect** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| List of drugs with the evidence of targeting the observed variant of the mutated gene regardless of the cancer type. The information is obtained from CIViC, CGI and DrugBank. | | | | | | | |
| **Gene** | **Mutation** | **Therapy** | **Effect** | **Disease** | | **Evidence[[1]](#footnote-1)** | **References** |
| {%tr for pharm in direct\_pharm\_table %} |  |  |  |  | |  |  |
| {{ pharm.gene }} | {{ pharm.variant }} | {{ pharm.drug\_name }} | {{ pharm.variant\_drug\_association }} | {{ pharm.tumor\_list }} | {{ pharm.match\_level }} | | {{ pharm.ref\_map }} |
|  |  |  |  |  |  | | {%tr endfor %} |

| **Somatic Mutations in Pharmaceutical Target proteins** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Pharmacogenomics Summary of Drugs Targeting Affected Genes** | | | | | | |
| Therapies that have evidence of targeting the affected gene. The information is obtained from CIViC, CGI and DrugBank. Results are filtered according to cancer type, if it is provided in metadata. | | | | | | |
| **Gene** | **Mutation** | **Therapy** | **Effect** | **Disease** | **Evidence[[2]](#footnote-2)** | **References** |
| {%tr for variant in pharm\_table %} |  |  |  |  |  |  |
| {{ variant.gene }} | {{ variant.variant }} | {{ variant.drug\_name }} | {{ variant.variant\_drug\_association }} | {{ variant.tumor\_list }} | {{ variant.match\_level }} | {{ variant.ref\_map }} |
|  |  |  |  |  |  | {%tr endfor %} |

| **Summary of Cancer Drugs Targeting Affected Genes** | | | |
| --- | --- | --- | --- |
| List of cancer drugs targeting the mutated gene. Information is obtained from DrugBank, Therapeutic Target Database, IUPHAR, and Santos et al. | | | |
| **Gene** | **Status** | **Therapy** | **References** | |
| {%tr for drug in mechanistic\_drug\_table %} |  |  |  | |
| {{ drug.gene }} | {{ drug.approval\_status }} | {{ drug.drug\_name }} | {{ drug.ref\_map }} | |
|  |  |  | {%tr endfor %} | |

| **Adverse Effects** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| List of drugs with known adverse effects | | | | | | |
| **Gene** | **Mutation** | **Therapy** | **Effect** | **Variant Type** | **Evidence** | **References** |
| {%tr for ads in adverse\_table %} |  |  |  |  |  |  |
| {{ ads.gene }} | {{ ads.variant }} | {{ ads.drug\_name }} | {{ ads.variant\_drug\_association }} | {{ ads.variant\_type }} | {{ ads.match\_level }} | {{ ads.ref\_map }} |
|  |  |  |  |  |  | {%tr endfor %} |

| **References** | |
| --- | --- |
| The publications of the reference IDs given in the tables above. | |
| {%tr for refid in appendix\_reference\_table %} |  |
| {{ refid.index }} | {{ refid.combined }} |
|  | {%tr endfor %} |

{% if tag == “SNV” %}

| **Appendix** | | | | | |
| --- | --- | --- | --- | --- | --- |
| All the somatic variants of the patient with their dbSNP and COSMIC IDs. | | | | | |
| **Gene** | **Mutation** | **Consequence** | **VAF** | **dbSNP** | **COSMIC** |
| {%tr for app in appendix\_variant\_table %} |  |  |  |  |  |
| {{ app.gene }} | {{ app.mutation }} | {{ app.Consequence }} | {{ app.vaf }} | {{ app.dbSNP }} | {{ app.COSMIC }} |
|  |  |  |  |  | {%tr endfor %} |

{% elif tag == “CNV” %}

| **Appendix** | | |
| --- | --- | --- |
| All the somatic variants of the patient with their dbSNP and COSMIC IDs. | | |
| **Gene** | **Type** | **Copy Number** | |
| {%tr for app in appendix\_variant\_table %} |  |  | |
| {{ app.gene }} | {{ app.type }} | {{ app.copy\_number }} | |
|  |  | {%tr endfor %} | |

{% endif %}

|  |
| --- |
| **Disclaimer** |
| This report is intended as a hypothesis generating framework and is thus intended for research use only and not for diagnostic or clinical purposes. Information provided in this report does not replace a physician’s medical judgement and usage is entirely at your own risk. The providers of this resource shall in no event be liable for any direct, indirect, incidental, consequential, or exemplary damages. |

1. [CIViC evidence levels are used](https://civicdb.org/help/evidence/evidence-levels). A = Validated association, B = Clinical evidence, C = Case study, D = Preclinical evidence, E = Inferential association [↑](#footnote-ref-1)
2. [CIViC evidence levels are used](https://civicdb.org/help/evidence/evidence-levels). A = Validated association, B = Clinical evidence, C = Case study, D = Preclinical evidence, E = Inferential association [↑](#footnote-ref-2)