

# RED interchange API - Search/Read Observations

Observations represent medical documentations. Observations are assigned to a patient and may be searched. A **search request (GET)** for patient observations returns a bundle of one or more FHIR items of type [KBV\\_PR\\_AW\\_Observation\\_Befund](#).

## Example for a SEARCH request for observations for a given patient

```
{{baseUrl}}/{{tenant}}/Observation?page=1&subject=Patient/6006
```

Example: this search requests fetches all observations of patient 6006 using paging to limit the number of results.

For an example see [RED Interchange API - Postman Collection](#) 0108 - Patient - All Observation (Befunde)

Observations stored in tables may be formatted using this addition:

## Example for a search request for all observations for a given patient with formatted tables

```
{{baseUrl}}/{{tenant}}/Observation?page=1&_ExportObservationTables=true&subject=Patient/6020
```

For an example see [RED Interchange API - Postman Collection](#) 0109 - Patient - All Observation (Befunde) Tables

Data of a specific observation may be fetched using a **read request (GET)** with the identifier of the specific observation. The request returns a FHIR item of type [KBV\\_PR\\_AW\\_Observation\\_Befund](#).

## Example of a READ request for a specific observation

```
{{baseUrl}}/{{tenant}}/Observation/egIIGDULo0Gdw6ld
```

Example: this read request returns the FHIR item for observation with ID egIIGDULo0Gdw6ld. The ID may be retrieved by a search request sent before this request.

For an example see [RED Interchange API - Postman Collection](#) 0110 - Patient - Specific Observation

### Example of a FHIR item for an observation

```
<Observation xmlns="http://hl7.org/fhir">
  <id value="egIIGDULo0Gdw6ld"/>
  <meta>
    <versionId value="1"/>
    <lastUpdated value="2022-08-02T00:00:00+00:00"/>
    <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_AW_Observation_Befund|1.2.0"/>
  </meta>
  <text>
    <status value="extensions"/>
    <div xmlns="http://www.w3.org/1999/xhtml">Befund von Patient </div>
  </text>
  <status value="final"/>
  <category>
    <coding>
      <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_AW_Befundart"/>
      <code value="Eigenbefund"/>
    </coding>
  </category>
  <code>
    <coding>
      <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_AW_Ressourcentyp"/>
      <code value="Befund"/>
    </coding>
    <coding>
      <system value="http://loinc.org"/>
      <code value="8478-0"/>
    </coding>
  </code>
  <subject>
    <reference value="Patient/PatientIdentifier"/>
  </subject>
  <encounter>
    <reference value="Encounter"/>
  </encounter>
  <valueString value="Blutdruck: 140/90 mm[Hg]."/>
</Observation>
```

If the user has marked an observation with a significance an interpretation object will be added to the bundle.

```
<interpretation url="http://terminology.hl7.org/CodeSystem/v3-ObservationInterpretation">
  <valueCodeableConcept>
    <coding>
      <system value="http://hl7.org/fhir/ValueSet/observation-interpretation"/>
      <code value="H"/>
      <display value="stark auffällig"/>
    </coding>
  </valueCodeableConcept>
</interpretation>
```

If the user has tagged the observation all tags will be added as components.

```
<component>
  <coding>
    <system value="http://redmedical.de/user-tags"/>
    <code value="Kaffee"/>
    <display value="Kaffeetrinker"/>
  </coding>
  <coding>
    <system value="http://redmedical.de/user-tags"/>
    <code value="ANAMNESE"/>
    <display value="Anamnese"/>
  </coding>
</component>
```