

# RED interchange API - Search/Read DocumentReferences

DocumentReferences represent all documents stored in the patient record:

- PDF files scanned and imported using the document upload
- Images imported via document upload or interfaces such as GDT or DICOM
- Letters created in RED ([Erlkönig - Briefe](#))
- Forms such as prescriptions, referrals ([Erlkönig - Formulardruck](#))

Document references are assigned to a patient and may be searched. A **search request (GET)** for patient document references returns a bundle of one or more FHIR items of type [KBV\\_PR\\_AW\\_Anlage](#).

## Example for a SEARCH request for document references of a given patient with full content

```
{{baseURL}}/{{tenant}}/DocumentReference?page=1&subject=Patient/6006
```

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

A search request for document references will return a base64 string representing the document content rendered as PDF file for each document item. In order to fetch document metadata only the request can be extended by adding the summary parameter to the request. A request with `summary=true` will return all document references with metadata but without document content. This is preferred if only selected documents with full content are to be fetched.

## Example for a SEARCH request for document references of a given patient with summaries only

```
{{baseURL}}/{{tenant}}/DocumentReference?page=1&summary=true&subject=Patient/6006
```

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

## Example of a READ request for a specific document reference

```
{{baseURL}}/{{tenant}}/DocumentReference/ehcRBg8T0ejevvTb
```

Example: this read request returns the FHIR item for document reference with ID ehcRBg8T0ejevvTb. The ID may be retrieved by a search request sent before this request.

### Example of a FHIR item for a document reference

```
<DocumentReference xmlns="http://hl7.org/fhir">
  <id value="ehcRBg8T0ejevvtb"/>
  <meta>
    <versionId value="1"/>
    <lastUpdated value="2022-06-23T00:00:00+00:00"/>
    <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_AW_Anlage|1.2.0"/>
  </meta>
  <text>
    <status value="extensions"/>
    <div xmlns="http://www.w3.org/1999/xhtml">Referenz auf Dokument vom 23.06.2022 (V1) | ID
ehcRBg8T0ejevvtb | Name Heilmittel Physiotherapie (ab 01.10.2020) | Anlagetyp KV-Muster_13 | Filetyp
file_type_pdf | erstellt am 23.06.2022 | zuletzt bearbeitet 2022-06-23T00:00:00+00:00</div>
  </text>
  <masterIdentifier>
    <type>
      <coding>
        <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_AW_Anlage_Identifiertyp"/>
        <code value="Spezifikationsversion"/>
      </coding>
    </type>
    <value value="4Q2020"/>
  </masterIdentifier>
  <identifier>
    <type>
      <coding>
        <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_AW_Anlage_Identifiertyp"/>
        <code value="Bezeichnung"/>
      </coding>
    </type>
    <value value="Heilmittel Physiotherapie (ab 01.10.2020)"/>
  </identifier>
  <status value="current"/>
  <type>
    <coding>
      <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_AW_Anlagetyp"/>
      <code value="KV-Muster_13"/>
    </coding>
  </type>
  <category>
    <coding>
      <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_AW_Ressourcentyp"/>
      <code value="Anlage"/>
    </coding>
  </category>
  <date value="2022-06-23T00:00:00+00:00"/>
  <description value="Heilmittel Physiotherapie (ab 01.10.2020)"/>
  <content>
    <attachment>
      <extension url="https://fhir.kbv.de/StructureDefinition/KBV_EX_AW_Anlage_Version">
        <valueCodeableConcept>
          <coding>
            <system value="http://www.redmedical.de/identifiers/documents"/>
            <code value="1.00"/>
          </coding>
        </valueCodeableConcept>
      </extension>
      <contentType value="application/pdf"/>
      <data value="JVBERi0xLjQKJfbk/N8K...M3NTMKJSVFT0YK"/> // base64-string with document content
      <url value="Heilmittel Physiotherapie (ab 01.10.2020)"/>
      <title value="Heilmittel Physiotherapie (ab 01.10.2020)"/>
      <creation value="2022-06-23T00:00:00+00:00"/>
    </attachment>
  </content>
</DocumentReference>
```