## Specimen selection

<table>
<thead>
<tr>
<th>Cancer type</th>
<th>MyChoice® CDx</th>
<th>Precise™ Tumor</th>
<th>PD-L1</th>
<th>FRα</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovarian, fallopian tube, and primary peritoneal cancer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Endometrial primary</td>
<td>☐</td>
<td>✓</td>
<td>✓</td>
<td>☐</td>
</tr>
<tr>
<td>All other tumor types</td>
<td>☐</td>
<td>✓</td>
<td>✓</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fixative</th>
<th>MyChoice® CDx</th>
<th>Precise™ Tumor</th>
<th>PD-L1</th>
<th>FRα</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% neutral buffered formalin</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>☐</td>
</tr>
<tr>
<td>Formalin and alcohol mixture</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>☐</td>
</tr>
<tr>
<td>Any other validated fixative</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specimen types</th>
<th>MyChoice® CDx</th>
<th>Precise™ Tumor</th>
<th>PD-L1</th>
<th>FRα</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen section tissue</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cytology cell block</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Brain tissue</td>
<td>☐</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Acid decalcified bone</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>EDTA decalcified bone</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Most recent procedure recommended</td>
<td>☐</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Fine needle aspirate samples preserved only in formalin (not CytoLyt®) are acceptable for FRα testing.

### Single test order

At least one tumor block with a cross-sectional tumor area of 25mm² containing at least 40 µm of tumor should be chosen for testing.

If only tumor slides are available, preparation instructions below should be followed:
- Cut and label **one 5µm section** for H&E staining on a charged slide.
- Cut and label 5µm sections on **uncharged** slides:
  - Area of tumor (mm²) with ≥ 30% tumor: 20-25 | 15-19 | 10-14 | 5-9
    - # of 5µm unstained slides: 8 | 12 | 16 | 20
  - If cutting 10 µm sections, please label on slide "10µm".

### Multiple test order

At least one tumor block with a cross-sectional tumor area of 25mm² containing at least 80µm of tumor should be chosen for testing.

If only tumor slides are available, preparation instructions below should be followed:
- Cut and label **two 5µm sections** for H&E staining on a charged slide.
- Cut and label 5µm sections on **uncharged** slides:
  - Area of tumor (mm²) with ≥ 30% tumor: 20-25 | 15-19 | 10-14 | 5-9
    - # of 5µm unstained slides: 16 | 24 | 32 | 40
  - If cutting 10µm sections, please label on slide "10µm".

### Biopsy

- For small biopsies, try to submit at least 15 to 20 sections from 6 to 8 cores.

### Cytology

- Cytology cell blocks (e.g., ascites fluid) are acceptable but tumor content must exceed 30%. Unfixed cytology specimens are not appropriate for genomic testing.

### FOLR1/FRα and PD-L1 specimen collection

Can be performed on tumor specimen FFPE block if provided, or:
- Additional two slides, each with at least one section of 4-5 microns thickness provided on unstained, unbaked, positively charged, hydrophilic slides with 90 degree corners.
- A minimum of 50-100 tumor nuclei present.

For small biopsies, try to submit at least 30 to 40 sections from 6 to 8 cores.

---

**MyChoice® CDx**

**Precise™ Tumor**

**PD-L1**

**FRα**

---

**Cancer type**

- Ovarian, fallopian tube, and primary peritoneal cancer
- Endometrial primary
- All other tumor types

**Fixative**

- 10% neutral buffered formalin
- Formalin and alcohol mixture
- Any other validated fixative

**Specimen types**

- Frozen section tissue
- Cytology cell block
- Brain tissue
- Acid decalcified bone
- EDTA decalcified bone
- Most recent procedure recommended

---

1. **Chemotherapy-naive**
   - Ideal specimens are chemotherapy-naive tumors from primary debulking surgery or biopsy.

2. **Chemotherapy-treated**
   - If patient has received neoadjuvant therapy, chemotherapy-treated tumors from primary debulking surgery may be submitted, but chemotherapy-naive tumor from biopsy is preferred.

3. **Biopsy**
   - If debulking doesn’t provide sufficient tumor, pre-treatment biopsy specimens should be considered.

4. **Cytology**
   - Cytology cell blocks (e.g., ascites fluid) are acceptable but tumor content must exceed 30%. Unfixed cytology specimens are not appropriate for genomic testing.

---

**Blocks**

1. **Preferred**

   - If patient has received neoadjuvant therapy, chemotherapy-treated tumors from primary debulking surgery may be submitted, but chemotherapy-naive tumor from biopsy is preferred.

2. **Chemotherapy-treated**
   - If debulking doesn’t provide sufficient tumor, pre-treatment biopsy specimens should be considered.

---

**Slides**

- If only tumor slides are available, preparation instructions below should be followed:
  1. Cut and label **one 5µm section** for H&E staining on a charged slide.
  2. Cut and label 5µm sections on **uncharged** slides:
     - Area of tumor (mm²) with ≥ 30% tumor: 20-25 | 15-19 | 10-14 | 5-9
       - # of 5µm unstained slides: 8 | 12 | 16 | 20
     - If cutting 10 µm sections, please label on slide "10µm".

---

**Biopsy**

- For small biopsies, try to submit at least 15 to 20 sections from 6 to 8 cores.

---

**Cytology**

- Cytology cell blocks (e.g., ascites fluid) are acceptable but tumor content must exceed 30%. Unfixed cytology specimens are not appropriate for genomic testing.

---

**FOLR1/FRα and PD-L1 specimen collection**

Can be performed on tumor specimen FFPE block if provided, or:
- Additional two slides, each with at least one section of 4-5 microns thickness provided on unstained, unbaked, positively charged, hydrophilic slides with 90 degree corners.
- A minimum of 50-100 tumor nuclei present.

For small biopsies, try to submit at least 30 to 40 sections from 6 to 8 cores.
## Preparation and fixation of specimens

| Fixative | 10% neutral buffered formalin (NBF) is preferred, but others will be accepted.  
| Fixation time should not exceed 72 hours.  
| Fixative should be freshly diluted from stock within the previous 24 hours.  
| Fixation should take a suggested minimum of 6 hours and a maximum of 72 hours. This will help reduce fixative artifacts from over-fixation which can adversely affect the success of genetic testing.  
| Fixative penetrates tissue at a rate of -1mm/hr. Large specimens should be opened or incised to promote formalin penetration and reduce autolysis, which can adversely affect the success of testing.  
| Cytology specimens must be spun, embedded into cell blocks and fixed in formalin. They can then be assessed for neoplastic cell content the same way as tissue specimens.  |

| Collection | Specimens should be handled using a ‘genome-friendly’ protocol that minimizes nucleic acid damage, but maximizes nucleic acid recovery while also preserving tissue morphology.  
| Resection Specimen | Resection specimens should be delivered to pathology and undergo specimen selection ideally within 1 hour of surgical excision.  
| Biopsy specimen | Recommended to obtain additional core with a dedicated block for Myriad testing.  
| Biopsy to fixative time | Tissue should go directly into fixative or degradation can occur.  
| Ratio of fixative to tissue | 10:1 ideal, 15:1 minimum. Tissue should be fully covered by fixative.  
| Type of tissue | Ensure normal tissue is sampled before abnormal tissue to minimize contamination. Frozen tissue is accepted (not preferred) (MyChoice® CDx test only).  
| Fixation before processing time | At least 8 hours but less than 36 hours is optimal for DNA*.  
  
  *Fixation times longer than 72 hours should only be used when characteristics of the specimen demand it.  |

| Processing | Chemical 1 on processor | 10% NBF preferred.  
  
  Time here counts against time in fixative (less than 36 hours total).  
| Chemical 2 on processor | Alcohol is standard in increasing strengths to dehydrate tissue.  
| Chemical 3 on processor (Clearing agent) | Xylene is preferred. (Let Myriad Customer Service know if substitute is used.)  
| Processor run time | Typically runs overnight.  
  
  Less than 4 hours not optimal.  |

| MyChoice® CDx prep | Slides or blocks | DNA is more stable in blocks than slides, so blocks preferred.  
| Slide prep | Uncharged slides preferred.  
| Refrigeration | Ice block must be sent with the specimen to prevent the wax in the blocks/slides from melting. Heat can also damage DNA.  
| Labeling | Specimen containers must be clearly labeled according to institutional standards with an acceptable set of unique identifiers corresponding to information on the accompanying test request form.  |

If you have any questions about your specimen submission or to obtain additional kits, please call our dedicated Precise Oncology Solutions Customer Service at 877-283-6709 or email helpmed@myriad.com.