

## Supplementary File S1: Search Strategy

### 1. Key words

Population	Exposure
Mucinous ovarian cancer Mucinous ovarian carcinoma Epithelial ovarian cancer Epithelial ovarian carcinoma Type I-II tumours Ovarian carcinoma Ovarian neoplasm	Proteomics Immunohistochemistry Targeted therapy Molecular therapy

### 2. Ovid MEDLINE (2010-2021)

1. exp Proteomics/
2. proteomic\*.mp.
3. exp Immunohistochemistry/
4. immunohistochemistry.mp.
5. theranostic\*.mp.
6. 1 OR 2 OR 3 OR 4 OR 5
7. mucinous ovar\*.mp.
8. 6 AND 7

### 3. PUBMED (2010-2021)

1. "Proteomics"[Mesh]
2. proteomic\*
3. "Immunohistochemistry"[Mesh]
4. immunohistochemistry
5. theranostic\*
6. 1 OR 2 OR 3 OR 4 OR 5
7. "mucinous ovar\*"
8. 6 AND 7

### 4. Google Scholar (2010-2020)

Search: ((proteomics) OR (theranostic) OR (theranostics)) AND (("mucinous ovarian cancer") OR ("mucinous ovarian carcinoma"))

### 5. Ovid MEDLINE (2010-2021)

1. exp Ovarian Neoplasms/
2. "mucinous\*".af.
3. Adenocarcinoma, Mucinous/
4. "ovar\*".af.
5. (mucinous\* adj4 ovar\*).af.
6. 1 AND 2
7. 3 AND 4
8. 5 OR 6 OR 7
9. exp Proteomics/
10. exp mass spectrometry/
11. "spectrometr\*".af.

12. "proteo\*".af.  
 13.9 OR 10 OR 11 OR 12  
 14.8 AND 13

## 6. PUBMED (2010-2021)

1. "Ovarian Neoplasms"[Mesh]
2. Mucinous\*
3. "Adenocarcinoma, Mucinous"[Mesh]
4. Ovar\*
5. 1 AND 2
6. 3 AND 4
7. 5 OR 6
8. "Proteomics"[Mesh]
9. "Mass Spectrometry"[Mesh]
10. Spectrometr\*
11. Proteo\*
- 12.8 OR 9 OR 10 OR 11
- 13.7 and 12

## 7. Inclusion and exclusion criteria

### Immunohistochemistry

Inclusion criteria	Exclusion criteria
Studies that assessed protein expression profiles via immunohistochemistry in MOC tissue samples	Serum analysis only Immunohistochemistry was not used to quantify protein expression profiles Did not present data on immunohistochemistry findings specific to primary MOC Sample size $\leq 5$ , unless supported by other studies Experimental analyses were not performed Language other than English Abstract or full text was not available Published prior to the year 2010

### Proteomics

Inclusion criteria	Exclusion criteria
Studies that investigated aberrant protein expression by means of proteomic analysis.	Serum analysis only Proteomics was not used to quantify protein expression profiles Did not present data on proteomic findings specific to primary MOC Experimental analyses were not performed Language other than English Abstract or full text was not available Published prior to the year 2010

An additional search was conducted using:

((("ovarian neoplasms"[MeSH Terms] OR ("ovarian"[All Fields] AND "neoplasms"[All Fields]) OR "ovarian neoplasms"[All Fields] OR ("ovarian"[All Fields] AND "cancer"[All Fields]) OR "ovarian cancer"[All Fields]) AND ("mucine"[All Fields] OR "mucines"[All Fields] OR "mucinous"[All Fields] OR "mucins"[MeSH Terms] OR "mucins"[All Fields] OR "mucin"[All Fields]) AND ("immunohistochemistries"[All Fields] OR "immunohistochemistry"[MeSH Terms] OR "immunohistochemistry"[All Fields])) AND (2010:2021[pdat])

And was filtered to obtain further detail on the proteins in Table 1.