
Receptors[MeSH Terms])) OR (Complement Receptor Type 1[MeSH Terms])) OR (Inactivator Proteins, Complement[MeSH Terms])) OR (Proteins, Complement Inactivator[MeSH Terms])) OR (Serum Complement Inactivators[MeSH Terms])) OR (Complement Inactivators, Serum[MeSH Terms])) OR (Inactivators, Serum Complement[MeSH Terms])) OR (Complement Inactivating Proteins[MeSH Terms])) OR (Inactivating Proteins, Complement[MeSH Terms])) OR (Proteins, Complement Inactivating[MeSH Terms])) OR (Complement Cytolysis Inhibitor Proteins[MeSH Terms])) OR (Complement Cytolysis Inhibiting Proteins[MeSH Terms])) OR (CD46[MeSH Terms])) OR (CD55[MeSH Terms])) OR (CD59[MeSH Terms])

#3 (#1) AND (#2)

#4 #3 Filters: Publication date to 2023/06/01

#5 #4 Filters: Humans

Cochrane Library

#1 (Cancer):ti,ab,kw OR (tumor):ti,ab,kw OR (neoplasm):ti,ab,kw OR (carcinoma):ti,ab,kw

#2 (colon):ti,ab,kw OR (rectum):ti,ab,kw OR (Colorectal):ti,ab,kw OR (Rectal):ti,ab,kw

#3 (complement):ti,ab,kw OR (hemolytic complement):ti,ab,kw OR (CD55):ti,ab,kw OR (CD59):ti,ab,kw OR (CD46):ti,ab,kw

#4 (#1) AND (#2) AND (#3) AND 1980:2023[dp]

The Zhiwang Chinese
database

#1 TKA = ('CD59' + 'CD55' + 'CD46' + '补体')

#2 TKA = ('结肠癌' + '直肠癌' + '结直肠癌')

#3 #1 AND #2 AND publication date: 1980-01-01 to 2023-06-01

Supplementary Table 2 Cross-Sectional/Prevalence Study Quality

| | | | | | | | | | | | |
|--|--|---|---|---|---|---|--|--|---|--|---|
| Define the source of information (survey, record review) | List inclusion and exclusion criteria for identifying and exposed patients (cases and controls) or | Indicate whether or not subjects were consecutive if not population-based | Indicate if not consecutive if not population-based | Indicate if not consecutive if not population-based | Describe if any assessments undertaken for quality assurance purposes (e.g., masked to status of other aspects of the | Describe if any assessments undertaken for quality assurance purposes (e.g., masked to status of other aspects of the | Explain any patient exclusions from analysis | Describe how confounding was assessed and/or controlled. the analysis is | If applicable, explain how missing data were handled in the collection of | Summarize patient responses and completeness of data | Clarify what follow-up, if any, was expected and the percentage of patients for which incom |
|--|--|---|---|---|---|---|--|--|---|--|---|

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 tions -up
 was
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| | | | | | | | | | | | | |
|---------------------|-----|-----|---------|-----|---------|-----|-----|---------|---------|---------|---------|---|
| Koretz et al. 1992 | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Unclear | Unclear | Unclear | Unclear | 5 |
| Koretz et al. 1993 | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Unclear | Unclear | Unclear | Unclear | 5 |
| Niehans et al. 1996 | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Unclear | Unclear | Unclear | Unclear | 6 |

| | | | | | | | | | | | | |
|--------------------------------|-----|-----|---------|-----|---------|-----|-----|---------|---------|---------|---------|---|
| | | | | | r | | | | ar | | ar | |
| Thorsteinsson et al. 1998 | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Unclear | Unclear | Unclear | Unclear | 5 |
| Zimmermann-Nielsen et al. 2002 | Yes | Yes | Unclear | Yes | Yes | Yes | No | Unclear | Unclear | No | Unclear | 5 |
| Ren et al. 2008 | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Unclear | Unclear | Unclear | Unclear | 5 |
| Han et al. 2010 | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | No | Yes | Yes | 9 |
| Wang et al. 2010 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Unclear | 9 |
| Dowling et al. 2012 | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Unclear | Unclear | No | Unclear | 5 |
| Shang et al. 2014 | Yes | Yes | Unclear | Yes | Yes | Yes | No | Yes | Unclear | Yes | Unclear | 7 |
| Mehrabani et al. 2014 | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Unclear | Unclear | No | Unclear | 6 |
| Li et al. 2016 | Yes | Yes | Yes | Yes | Unclear | Yes | No | Yes | Unclear | Yes | Unclear | 7 |

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|------------------|-----|-----|---------|-----|---------|-----|-----|---------|---------|-----|---------|---|
| | | | | | r | | | | ar | | ar | |
| | Yes | Yes | Yes | Yes | Unclear | Yes | No | Unclear | Unclear | Yes | Unclear | 6 |
| Gou et al. 2019 | | | | | r | | | | ar | | ar | |
| | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Unclear | Unclear | Yes | Yes | 7 |
| Deng et al. 2022 | | | ar | | r | | | | ar | | | |
| Cui et al. 2022 | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | No | Yes | Yes | 9 |

Article quality was assessed as follows: low quality=0-3; moderate quality=4-7; high quality=8-11.

Supplementary Table 3 Characteristics of studies included in the meta-analysis.

| Author | Country | Sample size | Age | Sex | Disease classification | Study period | Outcome index | Assay | Result Judgment Criteria |
|---------------------|---------|-------------|-----------------|-------------|---|--------------|------------------|----------------------|--------------------------|
| Koretz et al. 1992 | Germany | 20/88 | Unavailable | Unavailable | TNM Grade I: 10, Grade II: 66, Grade III: 12 | Unavailable | CD55 | Immunohistochemistry | b |
| Koretz et al. 1993 | Germany | 20/71 | Unavailable | Unavailable | TNM Grade I: 6, Grade II: 46, Grade III: 19 | Unavailable | CD46, CD59 | Immunohistochemistry | b |
| Niehans et al. 1996 | USA | 10/10 | Unavailable | Unavailable | Unavailable | 1988-1990 | CD46, CD55, CD59 | Immunohistochemistry | b |
| Thorsteinsson | England | 15/18 | CRC: 71 (52-81) | Unavailable | Dukes' stage | Unavailable | CD46, | Immunohistochemistry | a |

| | | | | | | | | | |
|--------------------------------|---------|---------|--|------------------------------------|---|---------------------|------|------------------------------|-----------------|
| et al. 1998 | d | | years; Control: 71 (46-87) years CRC: female:36 | e | A: 1, stage B: 8, stage C: 9 | le | CD59 | histoche mistry | |
| Zimmermann-Nielsen et al. 2002 | Denmark | 20/20 | years, male:42 years; Control: female:73 male:71 years | CRC: 12/8 Control: 17/3 | Dukes' stage B: 9, stage C: 7, stage D:4 | Unavailab le | C3 | ELISA | Unavaila ble |
| Ren et al. 2008 | China | 160/100 | CRC: 54.6 (38-70) years; Control:50.9 years | CRC: 37/63 Control: 63/97 | Unavailable | Unavailab le | C3 | ELISA | Unavaila ble |
| Han et al. 2010 | China | 71/71 | ≥60 year:49 <60 years:22 | 26/45 | TNM Grade I: 15, Grade II: 21, Grade III: 27, Grade IV: 8 | 2002.06-20 03.05 | CD55 | Immuno histoche mistry | a |
| Wang et al. | China | 52/53 | CRC: 55.09±13.5 | Unavailab | Dukes' stage | 2006.03-20 | CD46 | Immuno | a |

| | | | | | | | | | |
|--------------------------|---------|-------------|--|------------------------------------|---|---------------------|------------------------|------------------------------|-----------------|
| 2010 | | | years; Control:49.52±15.4 years | le | A+B: 25, stage C+D: 28 | 06.09 | | histoche mistry | |
| Dowling et al. 2012 | Ireland | 30/32 | CRC: 64±10 years; Control: female:54+8 years, male:59+6 years | CRC: 15/17 Control: 15/15 | All the patients with CRC were stages IIIB, IIIC, or IV | Unavailab le | C3 | ELISA | Unavaila ble |
| Shang et al. 2014 | China | 121/1 21 | Unavailable | 46/75 | Unavailable | Unavailab le | CD46, CD55, CD59 | Immuno histoche mistry | a |
| Mehrabani et al. 2014 | Iran | 21/10 1 | CRC: 53.9±14.1 years; Control:47.5+15.1 years | CRC: 42/59 Control: 10/11 | Unavailable | 2010.06-20 12.06 | C3 | ELISA | Unavaila ble |
| Li et al. 2016 | China | 76/30 | CRC: 52.1±16.7 years; | CRC: 30/46 | Unavailable | 2008.01-20 15.01 | CD59 | Immuno histoche | b |

| | | | | | | | | | | |
|---------------------|-------|-------------|----------------------------------|-------------------|---|---------------------|------|--|------------------------------|---|
| | | | Control:50.4±14.7 years | Control: 13/17 | | | | | mistry | |
| Gou et al. 2019 | China | 121/1 21 | median age 66.2 (39-89) years | 43/78 | Unavailable | 2016.01-20 16.12 | C1 | | Immuno histoche mistry | b |
| Deng et al. 2022 | China | 87/93 | Unavailable | Unavailab le | TNM Grade I+II: 58, Grade II+III: 35 | Unavailab le | C1 | | Immuno histoche mistry | a |
| Cui et al. 2022 | China | 109/1 09 | mean age: 64 (29-86) years | 43/66 | TNM Grade I:10, Grade II: 42, Grade III: 35, Grade IV: 22 | 2014.10-20 15.10 | CD55 | | Immuno histoche mistry | a |

a: The degree of immunostaining (A): 0 point for no obvious coloring, 1 point for mild, 2 points for moderate, or 3 points for strong; percentage of positive cells (B): <5%, 0 point; 6~25%, 1 point; 26~50%, 2 points; 51~75%, 3 points; and >75%, 4 points;

b: Antigen expression was scored '+' whenever specific staining was detectable, and '-' when no antigen was detectable. To give an indication of the relative numbers of stained and unstained cells, sections were scored '+ > -' when stained cells clearly outnumbered the unstained cells; '+/-' when positive and negative cells were found in equal proportions; '- > +' when unstained cells outnumbered the stained cells.