**Table S1: Search strings**

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| **Pubmed** | |
| **Type of cancer** | **Search string** |
| Lung cancer | (((macrophag\*) AND (CD163)) AND (survival OR prognostic OR prognosis OR outcome)) AND ("lung cancer" OR "lung carcinoma") |
| Colorectal cancer | (((macrophag\*) AND (CD163)) AND (survival OR prognostic OR prognosis OR outcome)) AND (”colorectal cancer” OR ”colorectal carcinoma” OR “colon cancer” OR “rectal cancer” OR “colon carcinoma” OR “rectal carcinoma”) |
| Gastric cancer | (((macrophag\*) AND (CD163)) AND (survival OR prognostic OR prognosis OR outcome)) AND (”gastric cancer” OR “gastric carcinoma”) |
| Liver cancer | (((macrophag\*) AND (CD163)) AND (survival OR prognostic OR prognosis OR outcome)) AND (”liver cancer” OR “hepatocellular carcinoma” OR “intrahepatic cholangiocarcinoma”) |
| Breast cancer | (((macrophag\*) AND (CD163)) AND (survival OR prognostic OR prognosis OR outcome)) AND (“breast cancer” OR “breast carcinoma”) |
| **Web of Science** | |
| **Type of cancer** | **Search string** |
| Lung cancer | ALL=(macrophag\* AND CD163 AND (survival OR prognostic OR  prognosis OR outcome) AND (”lung cancer” OR ”lung carcinoma”)) |
| Colorectal cancer | ALL=(macrophag\* AND CD163 AND (survival OR prognostic OR prognosis OR outcome) AND (”colorectal cancer” OR ”colorectal carcinoma” OR “colon cancer” OR “rectal cancer” OR “colon carcinoma” OR “rectal carcinoma”)) |
| Gastric cancer | ALL=(macrophag\* AND CD163 AND (survival OR prognostic OR  prognosis OR outcome) AND (”gastric cancer” OR “gastric carcinoma”)) |
| Liver cancer | ALL=(macrophag\* AND CD163 AND (survival OR prognostic OR  prognosis OR outcome) AND (”liver cancer” OR “hepatocellular carcinoma” OR “intrahepatic cholangiocarcinoma”)) |
| Breast cancer | ALL=(macrophag\* AND CD163 AND (survival OR prognostic OR  prognosis OR outcome) AND (“breast cancer” OR “breast carcinoma”)) |
| **Scopus** | |
| **Type of cancer** | **Search string** |
| Lung cancer | TITLE-ABS-KEY (macrophage) AND TITLE-ABS KEY (cd163) AND TITLE-ABS-KEY (survival OR prognostic OR prognosis OR outcome) AND TITLE-ABS-KEY ("lung cancer" OR "lung carcinoma") |
| Colorectal cancer | TITLE-ABS-KEY(macrophage) AND TITLE-ABS-KEY(CD163) AND TITLE-ABS-KEY(survival OR prognostic OR prognosis OR outcome) AND TITLE-ABS-KEY(”colorectal cancer” OR ”colorectal carcinoma” OR “colon cancer” OR “rectal cancer” OR “colon carcinoma” OR “rectal carcinoma”) |
| Gastric cancer | TITLE-ABS-KEY(macrophage) AND TITLE-ABS-KEY(CD163) AND TITLE-ABS-KEY(survival OR prognostic OR prognosis OR outcome) AND TITLE-ABS-KEY("gastric cancer" OR "gastric carcinoma") |
| Liver cancer | TITLE-ABS-KEY(macrophage) AND TITLE-ABS-KEY(CD163) AND TITLE-ABS-KEY(survival OR prognostic OR prognosis OR outcome) AND TITLE-ABS-KEY("liver cancer" OR "hepatocellular carcinoma" OR "intrahepatic cholangiocarcinoma") |
| Breast cancer | TITLE-ABS-KEY(macrophage) AND TITLE-ABS-KEY(CD163) AND TITLE-ABS-KEY(survival OR prognostic OR prognosis OR outcome) AND TITLE-ABS-KEY("breast cancer" OR "breast carcinoma") |
| **Embase** | |
| **Type of cancer** | **Search string** |
| Lung cancer | macrophag\*:ti,ab,kw AND cd163:ti,ab,kw AND (survival:ti,ab,kw OR prognostic:ti,ab,kw OR prognosis:ti,ab,kw OR outcome:ti,ab,kw) AND ('lung cancer':ti,ab,kw OR 'lung carcinoma':ti,ab,kw) |
| Colorectal cancer | macrophag\*:ti,ab,kw AND cd163:ti,ab,kw AND (survival:ti,ab,kw OR prognostic:ti,ab,kw OR prognosis:ti,ab,kw OR outcome:ti,ab,kw) AND ('colorectal cancer':ti,ab,kw OR 'colorectal carcinoma':ti,ab,kw OR 'colon cancer':ti,ab,kw OR 'rectal cancer':ti,ab,kw OR 'colon carcinoma':ti,ab,kw OR 'rectal carcinoma':ti,ab,kw) |
| Gastric cancer | macrophag\*:ti,ab,kw AND cd163:ti,ab,kw AND (survival:ti,ab,kw OR prognostic:ti,ab,kw OR prognosis:ti,ab,kw OR outcome:ti,ab,kw) AND ('gastric cancer':ti,ab,kw OR 'gastric carcinoma':ti,ab,kw) |
| Liver cancer | macrophag\*:ti,ab,kw AND cd163:ti,ab,kw AND (survival:ti,ab,kw OR prognostic:ti,ab,kw OR prognosis:ti,ab,kw OR outcome:ti,ab,kw) AND ('liver cancer':ti,ab,kw OR 'hepatocellular carcinoma':ti,ab,kw OR 'intrahepatic cholangiocarcinoma':ti,ab,kw) |
| Breast cancer | macrophag\*:ti,ab,kw AND cd163:ti,ab,kw AND (survival:ti,ab,kw OR prognostic:ti,ab,kw OR prognosis:ti,ab,kw OR outcome:ti,ab,kw) AND ('breast cancer':ti,ab,kw OR 'breast carcinoma':ti,ab,kw) |

**Supplementary Table 1**: Search strings for all five types of cancer (lung cancer, colorectal cancer, gastric cancer, liver cancer, and breast cancer) in each of the four databases (PubMed, Web of Science, Scopus, and Embase) used to identify literature for the present review.