Carcinoembryonic Antigen as a Marker for Colorectal Cancer: Is It Clinically Useful?

#	Paper	IF	Citations
552	[Tumoral secretion markers: something more than clinical indicators]. **2001**, 20, 349-52		0
551	Intermethod variation in serum carcinoembryonic antigen (CEA) measurement. fresh serum pools and control materials compared. **2002**, 40, 167-73		10
550	The role of proteomics in the diagnosis and outcome prediction in colorectal cancer. **2002**, 1, 297-304		14
549	Oncolytic viruses: programmable tumour hunters. **2002**, 2, 243-54		34
548	Serum HCG beta, CA 72-4 and CEA are independent prognostic factors in colorectal cancer. **2002**, 101, 545-8		74
547	Clinical and histopathological evaluation of 13 cases of adenocarcinoma in aged rhesus macaques (Macaca mulatta). **2002**, 31, 74-83		22
546	Molecular cloning and characterization of a novel gene which is highly expressed in hepatocellular carcinoma. **2002**, 21, 4932-43		21
545	Tumormarker beim kolorektalen Karzinom. **2003**, 27, 20-25		
544	Clinical biomarkers in drug discovery and development. **2003**, 2, 566-80		583
543	Molecular characterization of a new gene, CEAL1, encoding for a carcinoembryonic antigen-like protein with a highly conserved domain of eukaryotic translation initiation factors. **2003**, 310, 79-89		22
542	Effect of hormone replacement therapy on serum levels of tumor markers in healthy postmenopausal women. **2003**, 46, 301-6		11
541	Clinical utility of biochemical markers in colorectal cancer: European Group on Tumour Markers (EGTM) guidelines. **2003**, 39, 718-27		287
540	Tumormarker beim kolorektalen Karzinom/Tumor Markers in Colorectal Cancer. **2003**, 27, 20-25		
539	Circulating vascular endothelial growth factor six months after primary surgery as a prognostic marker in patients with colorectal cancer. **2003**, 42, 837-45		19
538	Negative CEA values in Metastatic Colorectal Carcinoma and the Likelihood of Complete Chemotherapy Response. **2003**, 18, 28-32		1
537	Effect of Opium Smoking on Concentrations of Carcinoembryonic Antigen and Tissue Polypeptide Antigen. **2004**, 19, 305-309		
536	[S3-Guidelines Conference "Colorectal Carcinoma" 2004]. **2004**, 42, 1129-77		114

| 535 | Serum and bile markers for cholangiocarcinoma. **2004**, 24, 139-54 | | 148 |

534 Synbiotics and colon cancer. **2004**, 524-580 — 1

533 CEA, CA 242, CA 19-9, CA 72-4 and hCGbeta in the diagnosis of recurrent colorectal cancer. **2004**, 25, 228-34 — 36

532 The role of surrogate markers in the clinical development of antiretroviral therapy: a model for early evaluation of targeted cancer drugs. **2004**, 22, 149-60 — 6

531 Marcadores tumorales serológicos en cirugía hepatobiliopancreática. **2004**, 76, 276-283 — 1

530 Noninvasive imaging of transcriptionally restricted transgene expression following intratumoral injection of an adenovirus in which the COX-2 promoter drives a reporter gene. **2004**, 6, 395-404 — 22

529 [Serum vascular endothelial growth factor levels in patients with colorectal cancer and its prognostic significance]. **2004**, 122, 201-4 — 1

528 Serum HCG beta and CA 72-4 are stronger prognostic factors than CEA, CA 19-9 and CA 242 in pancreatic cancer. **2004**, 66, 126-31 — 62

527 Interaction analysis of the carcinoembryonic antigen (CEA) with its monoclonal antibody immobilized on a gold surface using Fourier transform infrared reflection-absorption spectroscopy (FT-IR RAS). **2005**, 21, 215-8 — 5

526 Surface-enhanced Raman spectroscopic detection of cancer biomarkers in intact cellular specimens. **2005**, 5699, 82 — 5

525 Preoperative serum levels of the carcinoembryonic antigen in hereditary non-polyposis colorectal cancer compared to levels in sporadic colorectal cancer. **2005**, 29, 356-60 — 9

524 Expression of cell adhesion molecules in oesophageal carcinoma and its prognostic value. **2005**, 58, 343-51 — 81

523 [S3-guideline conference "Colorectal Cancer" 2004]. **2005**, 130 Suppl 1, S5-53 — 17

522 Marcadores tumorales en oncología digestiva: cuáles solicitar y cuándo. **2005**, 4, 178-181 —

521 Noninvasive testing for colorectal cancer: a review. **2005**, 100, 1393-403 — 117

520 Carcinoembryonic antigen in the staging and follow-up of patients with colorectal cancer. **2005**, 23, 338-51 — 279

519 Carcinoembryonic antigen, alpha-fetoprotein, and prostate-specific antigen in the sera of industrial workers exposed to phenol, formaldehyde, urea, and mixed vapors. **2006**, 18, 1041-6 — 6

518 Serum tumor markers in breast cancer: are they of clinical value?. *Clinical Chemistry*, **2006**, 52, 345-51 — 5.5 — 305

517   Multivariate analysis of prognostic determinants for colorectal cancer patients with high preoperative serum CEA levels: prognostic value of postoperative serum CEA levels. **2006**, 22, 604-9   11

516   Colorectal cancer follow-up in 2005. **2006**, 15, 175-93, viii   5

515   Surgical approaches to cancer in patients who have inflammatory bowel disease. **2006**, 35, 641-73   8

514   SPR Biosensors for Medical Diagnostics. **2006**, 229-247   7

513   Statistically integrated metabonomic-proteomic studies on a human prostate cancer xenograft model in mice. **2006**, 5, 2642-55   136

512   Molecular prognostic markers in resectable colorectal liver metastases: a systematic review. **2006**, 42, 1728-43   53

511   Human neutrophil peptides 1, 2 and 3 are biochemical markers for metastatic colorectal cancer. **2006**, 42, 3057-64   49

510   Arginase as a Useful Factor for the Diagnosis of Colorectal Cancer Liver Metastases. **2006**, 21, 40-44   20

509   Potential role of novel hepatocellular carcinoma-associated gene IDD01 in promoting tumorigenesis of HepG2 cell line. **2006**, 119, 1709-1714   2

508   Tomographie par émission de positons au [18F]-fluorodésoxyglucose en cancérologie digestive. **2006**, 1, 1-10

507   Preoperative carcinoembryonic antigen and albumin in predicting survival in patients with colon and rectal carcinomas. **2006**, 40, 592-5   82

506   Explorations radio-isotopiques en pathologie digestive. **2006**, 1, 1-19

505   Using the Cancer Rehabilitation Questionnaire in patients with colorectal cancer. **2006**, 31, 106-13   6

504   Preoperative plasma vascular endothelial growth factor but not nitrite is a useful complementary tumor marker in patients with colorectal cancer. **2006**, 49, 883-94   14

503   Combined measurement of hepatocyte growth factor and carcinoembryonic antigen as a prognostic marker for patients with dukes a and B colorectal cancer: results of a five-year study. **2006**, 49, 1710-8   7

502   Increase in both CEA and CA19-9 in sera is an independent prognostic indicator in colorectal carcinoma. **2006**, 94, 132-7   42

501   Identification of PSME3 as a novel serum tumor marker for colorectal cancer by combining two-dimensional polyacrylamide gel electrophoresis with a strictly mass spectrometry-based approach for data analysis. **2006**, 5, 2092-101   118

500   Increased integrity of free circulating DNA in sera of patients with colorectal or periampullary cancer: direct quantitative PCR for ALU repeats. *Clinical Chemistry*, **2006**, 52, 1062-9   5.5   240

| 481 | National Academy of Clinical Biochemistry laboratory medicine practice guidelines for use of tumor markers in testicular, prostate, colorectal, breast, and ovarian cancers. *Clinical Chemistry*, **2008**, 54, e11-79 | 5.5 | 451 |

| 480 | Tumor marker utility and prognostic relevance of cathepsin B, cathepsin L, urokinase-type plasminogen activator, plasminogen activator inhibitor type-1, CEA and CA 19-9 in colorectal cancer. **2008**, 8, 194 | | 66 |

| 479 | Dynamic decision support graph--visualization of ANN-generated diagnostic indications of pathological conditions developing over time. **2008**, 42, 189-98 | | 3 |

| 478 | A personalized approach to cancer treatment: how biomarkers can help. *Clinical Chemistry*, **2008**, 54, 1770-9 | 5.5 | 106 |

| 477 | Pre- and postoperative levels in serum of mannan-binding lectin associated serine protease-2 -a prognostic marker in colorectal cancer. **2008**, 69, 414-20 | | 21 |

| 476 | Affinity analysis for biomolecular interactions based on magneto-optical relaxation measurements. **2008**, 19, 505102 | | 6 |

| 475 | Quantitative expression analysis and prognostic significance of the novel apoptosis-related gene BCL2L12 in colon cancer. **2008**, 389, 1467-75 | | 36 |

| 474 | Improving colorectal cancer management: the potential of proteomics. **2008**, 2, 253-89 | | 7 |

| 473 | Detection of Colorectal Cancer by Serum and Tissue Protein Profiling: A Prospective Study in a Population at Risk. **2008**, 3, 375-385 | | 10 |

| 472 | Carbohydrate markers in colon carcinoma. **2008**, 25, 233-42 | | 19 |

| 471 | Persistent high postoperative carcinoembryonic antigen in colorectal cancer patients--is it important?. **2009**, 64, 287-94 | | 16 |

| 470 | Identification of tumor-associated autoantigens for the diagnosis of colorectal cancer in serum using high density protein microarrays. **2009**, 8, 2382-95 | | 127 |

| 469 | Proteomics identification of desmin as a potential oncofetal diagnostic and prognostic biomarker in colorectal cancer. **2009**, 8, 1878-90 | | 83 |

| 468 | Limitations in SELDI-TOF MS whole serum proteomic profiling with IMAC surface to specifically detect colorectal cancer. **2009**, 9, 287 | | 22 |

| 467 | Preoperative serum carcinoembryonic antigen, albumin and age are supplementary to UICC staging systems in predicting survival for colorectal cancer patients undergoing surgical treatment. **2009**, 9, 288 | | 73 |

| 466 | Characterization of de novo synthesized proteins released from human colorectal tumour explants. **2009**, 30, 2442-53 | | 20 |

| 465 | Elevated preoperative serum carcinoembrionic antigen level may be an effective indicator for needing adjuvant chemotherapy after potentially curative resection of stage II colon cancer. **2009**, 99, 65-70 | | 33 |

| 464 | Diagnostic value of bile CEA assay for the detection of liver metastasis from colorectal cancer. **2009**, 8, 675-677 | | |

| 445 | Influence of obesity on the serum carcinoembryonic antigen value in patients with colorectal cancer. **2010**, 19, 2461-8 | 22 |

| 444 | Carcinoembryonic antigen concentrations in patients with acute coronary syndrome. **2010**, 48, 1339-43 | 10 |

| 443 | Blood-based peptide, genetic, and epigenetic biomarkers for diagnosing gastrointestinal cancers. **2010**, 4, 459-71 | 1 |

| 442 | In vitro analysis and in vivo tumor targeting of a humanized, grafted nanobody in mice using pinhole SPECT/micro-CT. **2010**, 51, 1099-106 | 89 |

| 441 | Evaluation of human neutrophil peptide-1, -2 and -3 as serum markers for colorectal cancer. **2010**, 7, 109-15 | 8 |

| 440 | Biomarkers for colorectal cancer. **2010**, 11, 3209-25 | 90 |

| 439 | Immunohistochemical detection of hepatic CEA+ cells: hepatic tumor cell dissemination in colorectal cancer patients--limits of surgery?. **2010**, 28, 381-6 | |

| 438 | S3 guidelines for colorectal carcinoma: results of an evidence-based consensus conference on February 6/7, 2004 and June 8/9, 2007 (for the topics IV, VI and VII). **2010**, 48, 65-136 | 73 |

| 437 | PROBING CANCER SIGNALING WITH RESONANT WAVEGUIDE GRATING BIOSENSORS. **2010**, 5, 1237-1248 | 22 |

| 436 | Targeted immunotherapy for colorectal cancer: monoclonal antibodies and immunotoxins. **2010**, 19 Suppl 1, S67-77 | 14 |

| 435 | HERG1 gene expression as a specific tumor marker in colorectal tissues. **2010**, 36, 72-7 | 30 |

| 434 | Immunohistochemical Detection of Hepatic CEA+ Cells: Hepatic Tumor Cell Dissemination in Colorectal Cancer Patientslimits of Surgery?. **2010**, 28, 381-386 | |

| 433 | Nanoparticle labelling-based magnetic immunoassay on chip combined with electrothermal vaporization-inductively coupled plasma mass spectrometry for the determination of carcinoembryonic antigen in human serum. **2011**, 136, 3934-42 | 42 |

| 432 | Identification of SEC61and its autoantibody as biomarkers for colorectal cancer. **2011**, 412, 887-93 | 15 |

| 431 | Signal-enhancing thermosensitive liposomes for highly sensitive immunosensor development. *Analytical Chemistry*, **2011**, 83, 563-70 | 7.8 | 30 |

| 430 | Role of carcinoembryonic antigen, magnetic resonance imaging, and positron emission tomography-computed tomography in the evaluation of patients with suspected local recurrence of colorectal cancer. **2011**, 35, 266-73 | 10 |

| 429 | Molecular Imaging and Metastasis. 516-537 | |

| 428 | Clinical significance of CDX2-positive circulating tumour cells in colorectal cancer patients. **2011**, 104, 1000-6 | 18 |

427	Accuracy of monitoring serum carcinoembryonic antigen levels in postoperative stage III colorectal cancer patients is limited to only the first postoperative year. **2011**, 41, 1357-62	9
426	Should a colonoscopy be recommended for healthy individuals with increased carcinoembryonic antigen levels? A case-control study. **2011**, 56, 2396-403	3
425	Highly sensitive poly[glycidyl methacrylate-co-poly(ethylene glycol) methacrylate] brush-based flow-through microarray immunoassay device. **2011**, 13, 769-77	35
424	Prognostic role of carcinoembryonic antigen is influenced by microsatellite instability genotype and stage in locally advanced colorectal cancers. **2011**, 35, 888-94	9
423	Preoperative serum carbohydrate antigen 125 level is an independent negative prognostic marker for overall survival in colorectal cancer. **2011**, 28, 789-95	9
422	Recommendations and expert opinion on the adjuvant treatment of colon cancer in Spain. **2011**, 13, 798-804	4
421	Primary peritoneal serous papillary carcinoma: a clinical and pathological study. **2011**, 17, 713-9	25
420	Metabolic Profiling of Human Colorectal Cancer Using High Resolution 1H Nuclear Magnetic Resonance Spectroscopy. **2011**, 29, 2511-2519	3
419	Soluble E-cadherin as a serum biomarker candidate: elevated levels in patients with late-stage colorectal carcinoma and FAP. **2011**, 128, 1384-92	35
418	Sensitive protein microarray synergistically amplified by polymer brush-enhanced immobilizations of both probe and reporter. **2011**, 360, 593-9	24
417	Image cytometry analysis of circulating tumor cells. **2011**, 102, 261-90	20
416	Circulating antibodies to carcinoembryonic antigen related to improved recurrence-free survival of patients with colorectal carcinoma. **2011**, 39, 838-45	8
415	Cytokeratin 20 and vascular endothelial growth factor as molecular markers in Egyptian patients with colorectal cancer. **2011**, 17, 160-7	1
414	Dendritic cell-specific intercellular adhesion molecule 3-grabbing non-integrin (DC-SIGN) recognizes a novel ligand, Mac-2-binding protein, characteristically expressed on human colorectal carcinomas. **2011**, 286, 22403-13	31
413	Green fluorescent-conjugated anti-CEA single chain antibody for the detection of CEA-positive cancer cells. **2011**, 30, 229-38	6
412	Stage-dependent alterations of the serum cytokine pattern in colorectal carcinoma. **2012**, 107, 1729-36	162
411	Increased plasma levels of the APC-interacting protein MAPRE1, LRG1, and IGFBP2 preceding a diagnosis of colorectal cancer in women. **2012**, 5, 655-64	69
410	Plasma miR-21: a potential diagnostic marker of colorectal cancer. **2012**, 256, 544-51	209

409	- Self-Contained Enzymatic Microassay Biochip for Cancer Detection. **2012**, 542-565	
408	Biomarker Detections Using Functional Noble Metal Nanoparticles. **2012**, 177-205	2
407	Measuring oncogenic signaling pathways in cancer with PET: an emerging paradigm from studies in castration-resistant prostate cancer. **2012**, 2, 985-94	15
406	Surgical systems biology and personalized longitudinal phenotyping in critical care. **2012**, 9, 593-608	5
405	Breast cancer and protein biomarkers. **2012**, 2, 86-91	23
404	Screening for cancer with molecular markers: progress comes with potential problems. **2012**, 12, 368-71	35
403	Transient elevation of serum carcinoembryonic antigen level in a patient with hypothyroidism. **2012**, 5, 269-272	
402	Colorectal Cancer. **2012**, 267-286	
401	Nanoporous gold as a solid support for protein immobilization and development of an electrochemical immunoassay for prostate specific antigen and carcinoembryonic antigen. **2012**, 179, 71-81	29
400	The CEA/CD3-bispecific antibody MEDI-565 (MT111) binds a nonlinear epitope in the full-length but not a short splice variant of CEA. **2012**, 7, e36412	20
399	Promoter CpG island methylation in colorectal cancer:. 306-322	
398	Adjuvant Therapy for Elderly Patients with Breast, Colon, and Lung Cancer. **2012**, 79-88	1
397	Systemic mirnas as potential biomarkers for malignancy. **2012**, 131, 2215-22	35
396	An algorithm designed for improving diagnostic efficiency by setting multi-cutoff values of multiple tumor markers. **2012**, 39, 5784-5791	1
395	A retrospective cohort study of metastatic colorectal cancer patients treated with oxaliplatin-based chemotherapy, with an exploratory analysis of changing serum carcinoembryonic antigen levels. **2012**, 8, 172-9	2
394	Tumor markers are elevated in patients with rheumatoid arthritis and do not indicate presence of cancer. **2012**, 15, 179-82	17
393	Serum concentrations of CA 125, CA 15-3, CA 19-9 and CEA in normal pregnancy: a longitudinal study. **2012**, 285, 579-84	27
392	Surface-enhanced Raman scattering study of carcinoembryonic antigen in serum from patients with colorectal cancers. **2013**, 113, 597-602	7

| 373 | A systematic review and meta-analysis of diagnostic and prognostic serum biomarkers of colorectal cancer. **2014**, 9, e103910 | 42 |

| 372 | The clinical significance of DC-SIGN and DC-SIGNR, which are novel markers expressed in human colon cancer. **2014**, 9, e114748 | 30 |

| 371 | Proteomic approaches in biomarker discovery: new perspectives in cancer diagnostics. **2014**, 2014, 260348 | 37 |

| 370 | Coexpression of IL-6 and TNF-□prognostic significance on breast cancer outcome. **2014**, 61, 205-12 | 46 |

| 369 | Sweet and sour: the impact of differential glycosylation in cancer cells undergoing epithelial-mesenchymal transition. *Frontiers in Oncology*, **2014**, 4, 59 | 5.3 | 48 |

| 368 | Diagnostic value of preoperative serum carcinoembryonic antigen and carbohydrate antigen 19-9 in colorectal cancer. **2014**, 21, e1-7 | 34 |

| 367 | Virtual gastrointestinal colonoscopy in combination with large bowel endoscopy: clinical application. **2014**, 20, 13820-32 | 3 |

| 366 | CEA/CD3 bispecific antibody MEDI-565/AMG 211 activation of T cells and subsequent killing of human tumors is independent of mutations commonly found in colorectal adenocarcinomas. **2014**, 6, 1571-84 | 63 |

| 365 | Characterization of epithelial subtypes of intraductal papillary mucinous neoplasm of the pancreas with endoscopic ultrasound and cyst fluid analysis. **2014**, 46, 1071-7 | 25 |

| 364 | Potent and specific antitumor effect of CEA-targeted photoimmunotherapy. **2014**, 135, 2697-710 | 58 |

| 363 | Suitability of circulating miRNAs as potential prognostic markers in colorectal cancer. **2014**, 23, 2632-7 | 21 |

| 362 | FDG PET/CT in the management of colorectal and anal cancers. **2014**, 203, 1109-19 | 46 |

| 361 | Serum miR-200c is a novel prognostic and metastasis-predictive biomarker in patients with colorectal cancer. **2014**, 259, 735-43 | 219 |

| 360 | Zwitterionic polymer-coated immunobeads for blood-based cancer diagnostics. **2014**, 35, 294-303 | 13 |

| 359 | Tumor markers in colorectal cancer, gastric cancer and gastrointestinal stromal cancers: European group on tumor markers 2014 guidelines update. **2014**, 134, 2513-22 | 214 |

| 358 | Precision treatment for cancer: role of prognostic and predictive markers. **2014**, 51, 30-45 | 22 |

| 357 | Kallikrein-related peptidase-6 (KLK6) mRNA expression is an independent prognostic tissue biomarker of poor disease-free and overall survival in colorectal adenocarcinoma. **2014**, 35, 4673-85 | 28 |

| 356 | Non-coding RNAs and Cancer. **2014**, | 6 |

337	The Prognostic Role of Para-Aortic Lymph Nodes in Patients with Colorectal Cancer: Is It Regional or Distant Disease?. **2015**, 10, e0130345		6
336	Glycosylation-Based Serum Biomarkers for Cancer Diagnostics and Prognostics. *BioMed Research International*, **2015**, 2015, 490531	3	114
335	Evaluation of Four Tumor Markers (CEA, AFP, CA125 and CA19-9) on Sysmex HISCL- 5000 Immunoassay Analyzer. **2015**, 3,		1
334	Serum Tumor Markers: Comparison between Guidelines and the Clinical Practice in a University Hospital Center. **2015**, 05,		
333	Colorectal carcinoma in Sudanese patients. **2015**, 3, 98		1
332	Specific Biomarkers: Detection of Cancer Biomarkers Through High-Throughput Transcriptomics Data. **2015**, 7, 652-666		2
331	Dynamic Light Scattering Coupled with Gold Nanoparticle Probes as a Powerful Sensing Technique for Chemical and Biological Target Detection. **2015**, 157-179		6
330	Electrochemistry of nonconjugated proteins and glycoproteins. Toward sensors for biomedicine and glycomics. **2015**, 115, 2045-108		223
329	Serum CA19-9 is significantly upregulated up to 2 years before diagnosis with pancreatic cancer: implications for early disease detection. **2015**, 21, 622-31		124
328	Protein glycosylation in cancer. **2015**, 10, 473-510		428
327	Carcinoembryonic antigen as a cancer screening marker by primary care physicians. **2015**, 215, 191-2		
326	The diagnostic utility of tumor markers: a teachable moment. **2015**, 128, e9-10		
325	Personalized treatment for patients with colorectal cancer: role of biomarkers. **2015**, 9, 337-47		18
324	EPMA position paper in cancer: current overview and future perspectives. **2015**, 6, 9		60
323	Utility of postoperative CEA for surveillance of recurrence after resection of primary colorectal cancer. **2015**, 16, 123-128		38
322	Taxifolin curbs NF-B-mediated Wnt/Ecatenin signaling via up-regulating Nrf2 pathway in experimental colon carcinogenesis. **2015**, 119, 103-12		63
321	Absolute quantification of DcR3 and GDF15 from human serum by LC-ESI MS. **2015**, 19, 1656-71		6
320	MAPRE1 as a plasma biomarker for early-stage colorectal cancer and adenomas. **2015**, 8, 1112-9		23

319	Identification of CEACAM5 as a Biomarker for Prewarning and Prognosis in Gastric Cancer. **2015**, 63, 922-30		18
318	Targeted serum metabolite profiling and sequential metabolite ratio analysis for colorectal cancer progression monitoring. **2015**, 407, 7857-63		47
317	3-D microarray and its microfabrication-free fluidic immunoassay device. *Analytica Chimica Acta*, **2015**, 889, 187-93	6.6	5
316	A solution processed carbon nanotube modified conducting paper sensor for cancer detection. **2015**, 3, 9305-9314		43
315	Multi-modal detection of colon malignancy by NIR-tagged recognition polymers and ultrasound contrast agents. **2015**, 478, 504-16		7
314	Biological Basis of Alcohol-Induced Cancer. **2015**,		3
313	A plasma microRNA panel for early detection of colorectal cancer. **2015**, 136, 152-61		117
312	SALL4 as a new biomarker for early colorectal cancers. **2015**, 141, 229-35		45
311	Cancer Biomarkers. **2016**,		3
310	Primary peritoneal carcinoma metastasizing to breast: a single case report and literature review from clinic to biology. **2016**, 13, 389-395		5
309	Serum carcinoembryonic antigen as a tumour marker in patients with endometrial cancer. **2016**, 23, e439-e442		4
308	Prognostic Factors for Survival after Resection of Pulmonary Metastases from Colorectal Carcinoma. **2016**, 22, 6-11		8
307	Circulating tumor DNA: a promising biomarker in the liquid biopsy of cancer. **2016**, 7, 48832-48841		148
306	Identification of Phosphorylated Cyclin-Dependent Kinase 1 Associated with Colorectal Cancer Survival Using Label-Free Quantitative Analyses. **2016**, 11, e0158844		7
305	Conducting paper based sensor for cancer biomarker detection. **2016**, 704, 012010		12
304	Development of Electrochemical Immunosensors towards Point-of-care Cancer Diagnostics: Clinically Relevant Studies. **2016**, 28, 1716-1729		29
303	Predictive Value of Carcinoembryonic and Carbohydrate Antigen 19-9 Related to Some Clinical, Endoscopic and Histological Colorectal Cancer Characteristics. **2016**, 35, 324-332		5
302	A novel frequency-shift readout system for CEA concentration detection application. **2016**,		1

301	Prognostic value of preoperative carcinoembryogenic antigen: Is it useful in all stages of colorectal cancer?. **2016**, 39, 191-198		
300	Expression of CEA, CA19-9, CA125, and EpCAM in pseudomyxoma peritonei. **2016**, 54, 47-54		18
299	Molecular-Counting-Free and Electrochemiluminescent Single-Molecule Immunoassay with Dual-Stabilizers-Capped CdSe Nanocrystals as Labels. *Analytical Chemistry*, **2016**, 88, 5482-8	7.8	55
298	Development and Validation of a Radiomics Nomogram for Preoperative Prediction of Lymph Node Metastasis in Colorectal Cancer. **2016**, 34, 2157-64		869
297	Extracellular matrix protein ITGBL1 promotes ovarian cancer cell migration and adhesion through Wnt/PCP signaling and FAK/SRC pathway. **2016**, 81, 145-151		26
296	Development of an impedimetric immunobiosensor for measurement of carcinoembryonic antigen. **2016**, 241, 203-211		8
295	Apoptotic pathways and stemness in the colorectal epithelium and lamina propria mucosae during the human embryogenesis and carcinogenesis. **2016**, 118, 693-703		3
294	Serum-based microRNA signatures in early diagnosis and prognosis prediction of colon cancer. **2016**, 37, 941-950		98
293	Lectin inhibits antigen-antibody reaction in a glycoform-specific manner: Application for detecting 2,6sialylated-carcinoembryonic antigen. **2016**, 16, 3081-3084		2
292	Diverticular disease and cancer: an unproven link. **2016**, 51, 1145-6		
291	Molecular Detection of Gastrointestinal Neoplasia: Innovations in Early Detection and Screening. **2016**, 45, 529-42		8
290	Evaluation of Lumipulse G1200 for the measurement of six tumor markers: Comparison with AIA 2000. **2016**, 49, 1302-1306		2
289	Advances in glucose metabolism research in colorectal cancer. **2016**, 5, 289-295		27
288	Molecular Biomarkers of Colorectal Cancer and Cancer Disparities: Current Status and Perspective. **2016**, 12, 332-344		9
287	Elevated Serum Carcinoembryonic Antigen Is Associated with a Worse Survival Outcome of Patients After Liver Resection for Hepatocellular Carcinoma: a Propensity Score Matching Analysis. **2016**, 20, 2063-2073		3
286	Ultrasensitive Luminescent In Vitro Detection for Tumor Markers Based on Inorganic Lanthanide Nano-Bioprobes. **2016**, 3, 1600197		24
285	Prognostic impact of carcinoembryonic antigen (CEA) on patients with metastatic pancreatic cancer: A retrospective cohort study. **2016**, 16, 859-64		20
284	Prospective, Multicenter Study of 5-Fluorouracil Therapeutic Drug Monitoring in Metastatic Colorectal Cancer Treated in Routine Clinical Practice. **2016**, 15, 381-388		36

| 265 | Enhanced colorectal cancer metastases in the alcohol-injured liver. **2017**, 34, 171-184 | 14 |

| 264 | Preparation of Carcinoembryonic Antigen Immunosensor Based on Au Nanoparticles Loaded-Metal-Organic Frameworks. **2017**, 45, 48-55 | 8 |

| 263 | Portable System for Rapid Field Test of CEA in Human Serum Based on Chemiluminescence Enzyme Immunoassay. **2017**, 26, 152-155 | 5 |

| 262 | Enhanced detection sensitivity of carcinoembryonic antigen on a plasmonic nanoimmunosensor by transmission grating-based total internal reflection scattering microscopy. **2017**, 96, 159-166 | 10 |

| 261 | Electrogenerated Chemiluminescence of Semiconductor Nanoparticles and Their Applications in Biosensors. **2017**, 4, 1573-1586 | 20 |

| 260 | A facile and rapid aptasensor based on split peroxidase DNAzyme for visual detection of carcinoembryonic antigen in saliva. **2017**, 253, 794-803 | 29 |

| 259 | Prognostic and Predictive Biomarkers for Colorectal Cancer. **2017**, 151-162 | 0 |

| 258 | Incorporation of CEA Improves Risk Stratification in Stage II Colon Cancer. **2017**, 21, 770-777 | 17 |

| 257 | Biomarker discovery by proteomics-based approaches for early detection and personalized medicine in colorectal cancer. **2017**, 11, 1600072 | 20 |

| 256 | Simultaneous quantitation of cytokeratin-19 fragment and carcinoembryonic antigen in human serum via quantum dot-doped nanoparticles. **2017**, 91, 60-65 | 66 |

| 255 | Appropriate Use Criteria for F-FDG PET/CT in Restaging and Treatment Response Assessment of Malignant Disease. **2017**, 58, 2026-2037 | 57 |

| 254 | Application and Indication of Carcinoembryonic Antigen Triggered 18F-Fluorodeoxyglucose Positron Emission Tomography/Computed Tomography Scanning in the Detection of Relapse of Colorectal Cancer Patients After Curative Therapy. **2017**, 41, 719-725 | 1 |

| 253 | Cancer vaccines and immunotherapeutic approaches in hepatobiliary and pancreatic cancers. **2017**, 13, 2931-2952 | 10 |

| 252 | CCAT1 and CCAT2 long noncoding RNAs, located within the 8q.24.21 'gene desert', serve as important prognostic biomarkers in colorectal cancer. **2017**, 28, 1882-1888 | 113 |

| 251 | Identification of actin beta-like 2 (ACTBL2) as novel, upregulated protein in colorectal cancer. **2017**, 152, 33-40 | 14 |

| 250 | Serum Trefoil Factor 3 as a Protein Biomarker for the Diagnosis of Colorectal Cancer. **2017**, 16, 440-445 | 8 |

| 249 | Identification of Recurrence-Predictive Indicators in Stage I Colorectal Cancer. **2017**, 41, 1126-1133 | 12 |

| 248 | Improving biosensing activity to carcinoembryonic antigen with orientated single domain antibodies. **2017**, 3, e00478 | 5 |

247   Colorectal Cancer. **2017**, 293-305

246   Cancer Biomarkers: Important Tools for Cancer Diagnosis and Prognosis. **2017**, 1-29   0

245   S3-Leitlinie Kolorektales Karzinom. **2017**, 55, 1344-1498   80

244   Metal-enhanced immunofluorescence assays for detection of carcinoembryonic antigen. **2017**,   1

243   Proteins are potent biomarkers to detect colon cancer progression. **2017**, 24, 1212-1221   16

242   MIP-Based Sensors: Promising New Tools for Cancer Biomarker Determination. **2017**, 17,   81

241   Detection of Lipid and Amphiphilic Biomarkers for Disease Diagnostics. **2017**, 7,   20

240   Hypotheses on the Potential of Rice Bran Intake to Prevent Gastrointestinal Cancer through the
       Modulation of Oxidative Stress. **2017**, 18,   16

239   Chemopreventive Potential of 2,3,5,4'-Tetrahydroxystilbene-2-O--D-glucoside on the Formation of
       Aberrant Crypt Foci in Azoxymethane-Induced Colorectal Cancer in Rats. *BioMed Research*   3   8
       International, **2017**, 2017, 3634915

238   LRG1 promotes proliferation and inhibits apoptosis in colorectal cancer cells via RUNX1 activation.
       2017, 12, e0175122   39

237   Methods and novel technology for microRNA quantification in colorectal cancer screening. **2017**, 9, 119   20

236   Preoperative Serum Carcinoembryonic Antigen as a Marker for Predicting the Outcome of Three
       Cancers. **2017**, 9, 1-7   14

235   CEACAM5 (carcinoembryonic antigen-related cell adhesion molecule 5 (carcinoembryonic antigen)).
       2017,

234   Analysis of gene expression EGFR and KRAS, microRNA-21 and microRNA-203 in patients with colon
       and rectal cancer and correlation with clinical outcome and prognostic factors. **2017**, 32, 243-250   5

233   Role of F-Fluorodeoxyglucose Positron Emission Tomography/Computed Tomography in the
       Diagnosis of Newly Found Suspected Malignant Solitary Pulmonary Lesions in Patients Who Have   4
       Received Curative Treatment for Colorectal Cancer. **2017**, 2017, 3458739

232   Evidence of Altered Glycosylation of Serum Proteins Prior to Pancreatic Cancer Diagnosis. **2017**, 18,   19

231   CA19-9 or CEA Decline after the First Cycle of Treatment Predicts Survival in Advanced Biliary Tract
       Cancer Patients Treated with S-1 and Cisplatin Chemotherapy. **2017**, 49, 807-815   6

230   Circulating MIC-1/GDF15 is a complementary screening biomarker with CEA and correlates with
       liver metastasis and poor survival in colorectal cancer. **2017**, 8, 24892-24901   33

229 Serum peptidome profiling for the diagnosis of colorectal cancer: discovery and validation in two independent cohorts. **2017**, 8, 59376-59386   17

228 Predictors for local recurrence and distant metastasis of mucinous colorectal adenocarcinoma. **2018**,   5

227 Nanobodies and Cancer: Current Status and New Perspectives. **2018**, 36, 221-237   16

226 The immunomodulatory role of tumor-derived extracellular vesicles in colorectal cancer. **2018**, 96, 733   9

225 Reduced miR-433 expression is associated with advanced stages and early relapse of colorectal cancer and restored miR-433 expression suppresses the migration, invasion and proliferation of tumor cells and in nude mice. **2018**, 15, 7579-7588   2

224 Clinical importance of DNA repair in sporadic colorectal cancer. **2018**, 126, 168-185   9

223 Correlation between circulating endothelial progenitor cells and serum carcinoembryonic antigen level in colorectal cancer. **2018**, 50, 307-312   5

222 Evaluation of Serum CEA, CA19-9, CA72-4, CA125 and Ferritin as Diagnostic Markers and Factors of Clinical Parameters for Colorectal Cancer. **2018**, 8, 2732   95

221 Exosomes-Small Players, Big Sound. **2018**, 29, 635-648   34

220 Plasmonic nanograting enhanced fluorescence for protein microarray analysis of carcinoembryonic antigen (CEA). **2018**, 10, 145-150   9

219 Fabrication of sensitive bioelectrode based on atomically thin CVD grown graphene for cancer biomarker detection. **2018**, 105, 173-181   43

218 Integrating Metal-Enhanced Fluorescence and Surface Acoustic Waves for Sensitive and Rapid Quantification of Cancer Biomarkers from Real Matrices. **2018**, 3, 222-229   18

217 Glycan analysis of colorectal cancer samples reveals stage-dependent changes in CEA glycosylation patterns. *Clinical Proteomics*, **2018**, 15, 9   5   25

216 Protein and glycomic plasma markers for early detection of adenoma and colon cancer. **2018**, 67, 473-484   39

215 Feasibility of CYFRA 21-1 as a serum biomarker for the detection of colorectal adenoma and advanced colorectal adenoma in people over the age of 45. **2018**, 32,   6

214 IGF-I and IGFBP-3 levels and their correlations with carcinoembryonic antigen in colorectal cancer patientsPeer review under responsibility of Alexandria University Faculty of Medicine.View all notesAvailable online 7 March 2017View all notes. **2018**, 54, 11-15   1

213 A Rayleigh surface acoustic wave (R-SAW) resonator biosensor based on positive and negative reflectors with sub-nanomolar limit of detection. **2018**, 254, 1-7   27

212 Developing Raman spectroscopy as a diagnostic tool for label-free antigen detection. **2018**, 11, e201700028   4

211	Photosensitization of Molecular Oxygen on Graphene Oxide for Ultrasensitive Signal Amplification. **2018**, 24, 2602-2608		17
210	A dual-signaling electrochemical ratiometric method for sensitive detection of carcinoembryonic antigen based on Au-Cu2S-CuS/graphene and Au-CeO2 supported toluidine blue complex. **2018**, 256, 504-511		28
209	Microfluidic communicating vessel chip for expedited and automated immunomagnetic assays. **2018**, 18, 3830-3839		10
208	Preoperative Serum Markers Prognostic Evaluation in Colon Cancer Patients. **2018**, 10,		1
207	A novel electrochemical immunoassay for carcinoembryonic antigen based on glucose oxidase-encapsulated nanogold hollow spheres with a pH meter readout. **2018**, 143, 5271-5277		15
206	The role of tissue and serum carcinoembryonic antigen in stages I to III of colorectal cancer-A retrospective cohort study. *Cancer Medicine*, **2018**, 7, 5327-5338	4.8	22
205	Detection of Gastric Cancer with Novel Methylated DNA Markers: Discovery, Tissue Validation, and Pilot Testing in Plasma. **2018**, 24, 5724-5734		27
204	Repurposing of sodium valproate in colon cancer associated with diabetes mellitus: Role of HDAC inhibition. **2018**, 121, 188-199		22
203	Simultaneous quantitation of carbohydrate antigen 125 and carcinoembryonic antigen in human serum via time-resolved fluoroimmunoassay. **2018**, 483, 222-226		11
202	Clinical Impact of Muscle Quantity and Quality in Colorectal Cancer Patients: A Propensity Score Matching Analysis. **2018**, 42, 1322-1333		22
201	Validation of Assaying Carcinoembryonic Antigen in Human Serum by Using Immunomagnetic Reduction. **2018**, 8, 10002		4
200	Clinicopathological and Prognostic Significance of Cancer Antigen 15-3 and Carcinoembryonic Antigen in Breast Cancer: A Meta-Analysis including 12,993 Patients. **2018**, 2018, 9863092		37
199	Colorectal cancer patients with different C-reactive protein levels and 5-year survival times can be differentiated with quantitative serum proteomics. **2018**, 13, e0195354		24
198	Serum Carcinoembryonic Antigen Level as a Marker for Advanced Stage and Chemotherapeutic Response in Extramammary Paget's Disease. **2018**, 98, 706-707		1
197	Colorectal Cancer. **2018**, 111-125		1
196	SWCNTs@GQDs composites as nanocarriers for enzyme-free dual-signal amplification electrochemical immunoassay of cancer biomarker. *Analytica Chimica Acta*, **2018**, 1042, 44-51	6.6	34
195	ABCA1 overexpression worsens colorectal cancer prognosis by facilitating tumour growth and caveolin-1-dependent invasiveness, and these effects can be ameliorated using the BET inhibitor apabetalone. **2018**, 12, 1735-1752		37
194	Metabolomics approach for predicting response to neoadjuvant chemotherapy for colorectal cancer. **2018**, 14, 110		8

193	Blocking Monocytic Myeloid-Derived Suppressor Cell Function via Anti-DC-HIL/GPNMB Antibody Restores the Integrity of T Cells from Cancer Patients. **2019**, 25, 828-838		26
192	GIDB: a knowledge database for the automated curation and multidimensional analysis of molecular signatures in gastrointestinal cancer. **2019**, 2019,		2
191	Circulating microRNAs as Promising Biomarkers in Colorectal Cancer. *Cancers*, **2019**, 11,	6.6	40
190	Simultaneous quantitative detection of multiple tumor markers in microfluidic nanoliter-volume droplets. **2019**, 205, 120096		15
189	Unrecognized Value of Carcinoembryonic Antigen in Recurrent Rectal and Sigmoid Colon Cancer: Case Series. **2019**, 23,		2
188	Bioinformatics Tools and Workflow to Select Blood Biomarkers for Early Cancer Diagnosis: An Application to Pancreatic Cancer. **2019**, 19, e1800489		15
187	Current and future molecular diagnostics of gastric cancer. **2019**, 19, 863-874		22
186	Association between serum carcinoembryonic antigen (CEA) levels and leukoaraiosis in middle-aged and older adults: A cross-sectional study. **2019**, 125, 110682		1
185	TCR-like antibodies in cancer immunotherapy. **2019**, 12, 99		17
184	Common molecular markers between circulating tumor cells and blood exosomes in colorectal cancer: a systematic and analytical review. **2019**, 11, 8669-8698		15
183	Circulating Biomarkers for Prediction of Objective Response to Chemotherapy in Pancreatic Cancer Patients. *Cancers*, **2019**, 11,	6.6	12
182	Circulating Tumor DNA Analysis: Clinical Implications for Colorectal Cancer Patients. A Systematic Review. **2019**, 3, pkz042		14
181	Clinical use of tumor biomarkers in prediction for prognosis and chemotherapeutic effect in esophageal squamous cell carcinoma. **2019**, 19, 526		19
180	Simultaneous amperometric immunosensing of the metastasis-related biomarkers IL-13Rα2 and CDH-17 by using grafted screen-printed electrodes and a composite prepared from quantum dots and carbon nanotubes for signal amplification. **2019**, 186, 411		29
179	Self-powered and self-signalled autonomous electrochemical biosensor applied to cancinoembryonic antigen determination. **2019**, 140, 111320		13
178	Proteogenomic Analysis of Human Colon Cancer Reveals New Therapeutic Opportunities. **2019**, 177, 1035-1049.e19		237
177	Colorectal cancer-associated ~61kDa hyaluronan serves as a novel biomarker for cancer progression and metastasis. **2019**, 286, 3148-3163		8
176	Immunotherapy of colorectal cancer: Challenges for therapeutic efficacy. **2019**, 76, 22-32		131

175   Photovoltaics, plasmonics, plastic antibodies and electrochromism combined for a novel generation of self-powered and self-signalled electrochemical biomimetic sensors. **2019**, 137, 72-81   5

174   Serum CEA levels in 49 different types of cancer and noncancer diseases. **2019**, 162, 213-227   31

173   A panel of three plasma microRNAs for colorectal cancer diagnosis. **2019**, 60, 67-76   16

172   High Glucose Concentrations Negatively Regulate the IGF1R/Src/ERK Axis through the MicroRNA-9 in Colorectal Cancer. **2019**, 8,   19

171   Chemopreventive efficacy zingerone (4-[4-hydroxy-3-methylphenyl] butan-2-one) in experimental colon carcinogenesis in Wistar rats. **2019**, 34, 610-625   20

170   Carcinoembryonic antigen is a sialyl Lewis x/a carrier and an E-selectin ligand in non-small cell lung cancer. **2019**, 55, 1033-1048   9

169   Targeting cancers through TCR-peptide/MHC interactions. **2019**, 12, 139   33

168   Finding Needles in Haystacks: The Use of Quantitative Proteomics for the Early Detection of Colorectal Cancer. **2019**,   0

167   A Novel Saliva-Based miRNA Signature for Colorectal Cancer Diagnosis. **2019**, 8,   28

166   Elevated Pretreatment CEA and CA19-9 Levels are Related to Early Treatment Failure in Esophageal Adenocarcinoma. **2019**, 42, 345-350   7

165   The effect of visceral fat on the hemodilution effect of serum carcinoembryonic antigen in Korean population. **2019**, 14, e0225649

164   Factors Affecting Oncologic Outcomes of 90Y Radioembolization of Heavily Pre-Treated Patients With Colon Cancer Liver Metastases. **2019**, 18, 8-18   21

163   An efficient constitutive expression system for Anti-CEACAM5 nanobody production in the yeast Pichia pastoris. **2019**, 155, 43-47   8

162   Close Relationship Between Immunological/Inflammatory Markers and Myopenia and Myosteatosis in Patients With Colorectal Cancer: A Propensity Score Matching Analysis. **2019**, 43, 508-515   21

161   Biomarkers in molecular pathology and oncology. **2020**, 597-601

160   Detection of carcinoembryonic antigen using a magnetoelastic nano-biosensor amplified with DNA-templated silver nanoclusters. **2020**, 31, 015501   9

159   Molecular signature of interleukin-22 in colon carcinoma cells and organoid models. **2020**, 216, 1-22   5

158   A giant magnetoimpedance effect based nonvolatile Boolean logic gate. **2020**, 53, 035001   2

157	Label-free diagnosis for colorectal cancer through coffee ring-assisted surface-enhanced Raman spectroscopy on blood serum. **2020**, 13, e201960176	21
156	A mucinous adenocarcinoma of the lip with elevated serum carcinoembryonic antigen levels: a case report. **2020**, 24, 127-132	1
155	CEA as a risk factor in predicting ocular metastasis from colorectal cancer. **2020**, 11, 51-56	2
154	Three-dimensional ring-oven washing technique for a paper-based immunodevice. **2020**, 35, 503-511	2
153	Resonance Raman scattering-infrared absorption dual-mode immunosensing for carcinoembryonic antigen based on ZnO@SiO nanocomposites. **2020**, 150, 111870	4
152	Circulating Extracellular Vesicle MicroRNA as Diagnostic Biomarkers in Early Colorectal Cancer-A Review. *Cancers*, **2019**, 12,	6.6	31
151	Is It Time to Introduce PET/CT in Rectal Cancer Guidelines?. **2020**, 45, 611-617	4
150	Exosomes as potential sources of biomarkers in colorectal cancer. **2020**, 476, 13-22	53
149	Bidirectional association between serum carcinoembryonic antigen and metabolic syndrome among the Chinese male population: two cohort studies. **2020**, 19, 233	0
148	CircTBL1XR1/miR-424 axis regulates Smad7 to promote the proliferation and metastasis of colorectal cancer. **2020**, 11, 918-931	4
147	Clinical significance of tumor marker in pancreatic cancer. **2020**,	
146	Diagnostic Value of Serum Insulin-Like Growth Factor Binding Protein 7 (IGFBP7) in Colorectal Cancer. **2020**, 13, 12131-12139	0
145	Biomarkers Determination Based on Surface-Enhanced Raman Scattering. **2020**, 8, 118	8
144	Association Between the Tumor Marker Carcinoembryonic Antigen and the Risk of Dementia. **2020**, 76, 845-851	0
143	An immunosensor for the determination of carcinoembryonic antigen by Surface Plasmon Resonance imaging. **2020**, 609, 113964	7
142	Limited usefulness of serum carcinoembryonic antigen and carbohydrate antigen 19-9 levels for gastrointestinal and whole-body cancer screening. **2020**, 10, 18202	3
141	Calorimetric assay to follow colorectal cancer development in experimental rat models. **2020**, 691, 178723	1
140	Circulating Tumour DNAs and Non-Coding RNAs as Liquid Biopsies for the Management of Colorectal Cancer Patients. **2020**, 2, 212-235	5

139	The Diagnostic Value of Serum L1CAM in Patients With Colorectal Cancer. **2020**, 19, 1533033820920971		1
138	Salt-induced gold nanoparticles aggregation lights up fluorescence of DNA-silver nanoclusters to monitor dual cancer markers carcinoembryonic antigen and carbohydrate antigen 125. *Analytica Chimica Acta*, **2020**, 1125, 41-49	6.6	15
137	Establishment of a CALU, AURKA, and MCM2 gene panel for discrimination of metastasis from primary colon and lung cancers. **2020**, 15, e0233717		9
136	Circulating Tumor DNA as a Preoperative Marker of Recurrence in Patients with Peritoneal Metastases of Colorectal Cancer: A Clinical Feasibility Study. **2020**, 9,		7
135	Personalized Medicine-Current and Emerging Predictive and Prognostic Biomarkers in Colorectal Cancer. *Cancers*, **2020**, 12,	6.6	18
134	The Role of Immune Checkpoint Inhibitors in Colorectal Adenocarcinoma. **2020**, 34, 349-362		13
133	Chitinase 3-Like 1, Nestin, and Testin Proteins as Novel Biomarkers of Potential Clinical Use in Colorectal Cancer: A Review. **2020**, 1279, 1-8		3
132	Plasma Lysyl-tRNA Synthetase 1 (KARS1) as a Novel Diagnostic and Monitoring Biomarker for Colorectal Cancer. **2020**, 9,		4
131	Dual sensitivity enhancement in gold nanoparticle-based lateral flow immunoassay for visual detection of carcinoembryonic antigen. **2020**, 1, 161-172		6
130	Correlation study of (IL-17, IL-17RA) and some biochemical parameters with patients of Iraq colorectal cancer after and before taking a dose of chemotherapy. **2020**,		
129	Cell free DNA: revolution in molecular diagnostics - the journey so far. **2020**, 41,		2
128	A case of stercoral colitis with marked elevation of serum carcinoembryonic antigen. **2020**, 8, 734-738		2
127	Potent immunomodulatory effects of an anti-CEA-IL-2 immunocytokine on tumor therapy and effects of stereotactic radiation. **2020**, 9, 1724052		6
126	In-Depth Mapping of the Urinary -Glycoproteome: Distinct Signatures of ccRCC-related Progression. *Cancers*, **2020**, 12,	6.6	8
125	Electrochemical Biosensors for Determination of Colorectal Tumor Biomarkers. **2020**, 11,		19
124	Clinical translation and implementation of optical imaging agents for precision image-guided cancer surgery. **2021**, 48, 332-339		9
123	Determination of carcinoembryonic antigen as a tumor marker using a novel graphene-based label-free electrochemical immunosensor. **2021**, 613, 114017		22
122	Biological Implications and Clinical Potential of Metastasis-Related miRNA in Colorectal Cancer. **2021**, 23, 42-54		11

121   Cancer. **2021**, 261-284   0

120   Tumor regression and immunity in combination therapy with anti-CEA chimeric antigen receptor T cells and anti-CEA-IL2 immunocytokine. **2021**, 10, 1899469   6

119   The tumorigenic and therapeutic functions of exosomes in colorectal cancer: Opportunity and challenges. **2021**, 39, 468-477   7

118   Colorectal Cancer. **2021**, 105-114

117   Novel biomarkers to detect occult cancer in patients with unprovoked venous thromboembolism: Rationale and design of the PLATO-VTE study. **2021**, 2, 100030   0

116   Identification of RCC Subtype-Specific microRNAs-Meta-Analysis of High-Throughput RCC Tumor microRNA Expression Data. *Cancers*, **2021**, 13,   6.6   4

115   Preoperative C-reactive protein and other inflammatory markers as predictors of postoperative complications in patients with colorectal neoplasia. **2021**, 19, 74   8

114   Prognosticating Colorectal Cancer Recurrence using Machine Learning Techniques. **2021**,

113   Highly Correlated Recurrence Prognosis in Patients with Metastatic Colorectal Cancer by Synergistic Consideration of Circulating Tumor Cells/Microemboli and Tumor Markers CEA/CA19-9. **2021**, 10,   3

112   Adjuvant properties of IFN-Ⅰand GM-CSF in the scFv6.C4 DNA vaccine against CEA-expressing tumors. **2021**,   0

111   Risk and prognostic nomograms for colorectal neuroendocrine neoplasm with liver metastasis: a population-based study. **2021**, 36, 1915-1927   3

110   Serum levels and positive rates of tumor biomarkers in oral precancer patients. **2021**, 120, 1324-1331   3

109   Higher serum homocysteine level and frequency of hyperhomocysteinemia in carcinoembryonic antigen-positive or squamous cell carcinoma-antigen-positive oral leukoplakia patients. **2021**, 120, 2128-2135   0

108   Serum macrophage inhibitory cytokine-1 serves as a novel diagnostic biomarker of early-stage colorectal cancer. **2021**, 26, 598-605   0

107   The predicting roles of carcinoembryonic antigen and its underlying mechanism in the progression of coronavirus disease 2019. **2021**, 25, 234   2

106   The use of radiomic analysis of magnetic resonance imaging in predicting distant metastases of rectal carcinoma following surgical resection: A systematic review and meta-analysis. **2021**,   1

105   Overexpression of gene in Saudi colon cancer patients. **2021**, 28, 6045-6049   0

104   Ultrasensitive and specific detection of glycoprotein with boronic acid-modified / fluorescein isothiocyanate-loaded graphene oxide as signal amplification matrix. **2021**, 344, 130327   3

| 103 | Discovery of a novel and a rare Kristen rat sarcoma viral oncogene homolog (KRAS) gene mutation in colorectal cancer patients. **2021**, 12, 5099-5109 | 2 |

| 102 | Accuracy evaluation of the C. elegans cancer test (N-NOSE) using a new combined method. **2021**, 27, 100370 | 0 |

| 101 | A multimer-based SERS aptasensor for highly sensitive and homogeneous assay of carcinoembryonic antigens. **2021**, 146, 3016-3024 | 4 |

| 100 | Biomarkers as Putative Therapeutic Targets in Colorectal Cancer. **2021**, 123-177 | |

| 99 | An Eight-CpG-based Methylation Classifier for Preoperative Discriminating Early and Advanced-Late Stage of Colorectal Cancer. **2020**, 11, 614160 | |

| 98 | Tumormarker bei gastrointestinalen Erkrankungen. **2006**, 141-154 | 0 |

| 97 | Alcohol, carcinoembryonic antigen processing and colorectal liver metastases. **2015**, 815, 295-311 | 4 |

| 96 | Monoklonale Antik̈per. **2003**, 494-523 | 1 |

| 95 | Carcinoembryonic Antigen Family Cell Adhesion Molecules (CEACAM) as Colorectal Cancer Biomarkers. **2015**, 685-705 | 1 |

| 94 | A novel anti-CEACAM5 monoclonal antibody, CC4, suppresses colorectal tumor growth and enhances NK cells-mediated tumor immunity. **2011**, 6, e21146 | 29 |

| 93 | Overall Survival of Stage III Colon Cancer with Only One Lymph Node Metastasis Is Independently Predicted by Preoperative Carcinoembryonic Antigen Level and Lymph Node Sampling Status. **2015**, 10, e0137053 | 7 |

| 92 | Association of N-Linked Glycoprotein Acetyls and Colorectal Cancer Incidence and Mortality. **2016**, 11, e0165615 | 23 |

| 91 | The CEA-/lo colorectal cancer cell population harbors cancer stem cells and metastatic cells. **2016**, 7, 80700-80715 | 19 |

| 90 | Elevated CEA is associated with worse survival in recurrent rectal cancer. **2017**, 8, 105936-105941 | 15 |

| 89 | Metabolite quantification of faecal extracts from colorectal cancer patients and healthy controls. **2018**, 9, 33278-33289 | 15 |

| 88 | The effect of canceroembryonic antigen on cytokine production by immunocompetent blood cells in patients with breast cancer. **2018**, 17, 5-12 | 1 |

| 87 | Simultaneous Detection of VEGF and CEA by Time-Resolved Chemiluminescence Enzyme-Linked Aptamer Assay. **2020**, 15, 9975-9985 | 2 |

| 86 | LncRNAs: Potential Novel Prognostic and Diagnostic Biomarkers in Colorectal Cancer. **2020**, 27, 5067-5077 | 25 |

| 85 | Enrichment of Up-regulated and Down-regulated Gene Clusters Using Gene Ontology, miRNAs and lncRNAs in Colorectal Cancer. **2019**, 22, 534-545 | 7 |

| 84 | Individualized Cutoff Value of the Preoperative Carcinoembryonic Antigen Level is Necessary for Optimal Use as a Prognostic Marker. **2013**, 29, 106-14 | 18 |

| 83 | Identification of serum proteins discriminating colorectal cancer patients and healthy controls using surface-enhanced laser desorption ionisation-time of flight mass spectrometry. **2006**, 12, 1536-44 | 120 |

| 82 | Correlation between metastatic potential and variants from colorectal tumor cell line HT-29. **2003**, 9, 2627-31 | 10 |

| 81 | Proliferation and differentiation markers of colorectal adenocarcinomaand their correlation with clinicopathological factors. **2016**, 46, 1168-76 | 2 |

| 80 | MicroRNAs: promising biomarkers for diagnosis and therapeutic targets in human colorectal cancer metastasis. **2015**, 48, 217-22 | 27 |

| 79 | Comparison of serum tumor associated material (TAM) with conventional biomarkers in cancer patients. **2012**, 13, 2399-403 | 44 |

| 78 | Overall survival and clinicopathological characteristics of patients with breast cancer in relation to the expression pattern of HER-2, IL-6, TNF-⍺ and TGF-β. **2013**, 14, 6813-20 | 25 |

| 77 | Prognostic significance of circulating tumor cells and serum CA15-3 levels in metastatic breast cancer, single center experience, preliminary results. **2013**, 14, 1725-9 | 16 |

| 76 | Optimization of reference genes for normalization of the quantitative polymerase chain reaction in tissue samples of gastric cancer. **2014**, 15, 5815-8 | 6 |

| 75 | On-Site Detection of Carcinoembryonic Antigen in Human Serum. **2021**, 11, | 3 |

| 74 | Elevated CEA with negative PET scan on surveillance of colorectal cancers-a role of CEA kinetics. **2021**, 1 | 0 |

| 73 | Bispecific antibodies in colorectal cancer therapy: recent insights and emerging concepts. **2021**, 13, 1355-1367 | 0 |

| 72 | Anti-carcinoembryonic antigen immunity. **2003**, 21, 299-325 | |

| 71 | C. **2005**, 613-652 | |

| 70 | Tumormarker. **2006**, 499-522 | |

| 69 | Labormessgrößen. **2009**, 583-1069 | |

| 68 | Colorectal Cancer: Immunohistochemical Diagnosis with Heterogeneous Nuclear Ribonucleoprotein K. **2009**, 25-42 | |

67   Tumormarker. **2011**, 375-392

66   Serological Markers of Digestive Tract Cancers. **2013**, 249-270

65   Preoperative Carbohydrate Antigen 19-9 Levels Can Predict Stage and Survival Rate in Patients with Colorectal Cancer. **2013**, 11, 184   0

64   miRNAs as Cancer Biomarkers. **2014**, 97-124

63   Carcinoembryonic Antigen-Family Cell Adhesion Molecules (CEACAM) as Colorectal Cancer Biomarkers. **2014**, 1-17

62   A Rare Case of Early Cancer in the Ascending Colon with Lung Metastasis Diagnosed by a High Level of Serum CEA. **2014**, 67, 291-295

61   Diagnostic Applications of Nuclear Medicine: Tumors of the Liver and Biliary Tract. **2016**, 1-23

60   Diagnostic Applications of Nuclear Medicine: Tumors of the Liver and Biliary Tract. **2017**, 725-747

59   The diagnostic value of macrophage migration inhibitory factor, carcinoembryonic antigen, and carbohydrate antigen 19-9 in gastric cancer. **2018**, 6, 179-185

58   Association of Carcinoembryonic Antigen with Mortality in an Insurance Applicant Population. **2019**, 48, 24-35

57   Kolorektal Kanserlerin Tanı ve Prognostik Takibinde Eski ve Yeni Serum Biyobelirteçleri: Sistematik İnceleme ve Meta-Analiz. **2019**, 902-919

56   Role of circulating miRNA-17-3P as a potential diagnostic biomarker for sporadic colon cancer in Egyptian cohort. **2020**, 10,

55   Population-based universal screening for CRC: Secondary prevention. **2022**, 45-56

54   PET in Gastrointestinal, Pancreatic, and Liver Cancers. **2020**, 597-625

53   Association between plasma prostaglandin E2 level and colorectal cancer. **2021**, 30, 59-68   0

52   Tumormarker. **2006**, 339-356

51   Kolon - Rektum. **2006**, 533-598

50   Monoklonale Antikörper: Grundlagen und ihre Bedeutung in Diagnostik und Therapie. **2008**, 449-475

49	Mode of progression after radioembolization in patients with colorectal cancer liver metastases. *EJNMMI Research*, **2020**, 10, 107	3.6	1
48	State-of-the-Art: Exosomes in Colorectal Cancer. *Current Cancer Drug Targets*, **2021**,	2.8	0
47	Serum Carcinoembryonic Antigen as a Biomarker for Medullary Thyroid Cancer. *International Journal of Thyroidology*, **2021**, 14, 143-151	0.2	1
46	A Prognostic Nomogram for T3N0 Rectal Cancer After Total Mesorectal Excision to Help Select Patients for Adjuvant Therapy.. *Frontiers in Oncology*, **2021**, 11, 698866	5.3	
45	Superiority of fecal carcinoembryonic antigen as diagnosis marker for adenomatous polyposis coli and asymptomatic colorectal cancer.. *Therapeutic Advances in Gastroenterology*, **2021**, 14, 17562848211062792	4.7	
44	A Versatile Platform for Sensitive and Label-Free Identification of Biomarkers through an Exo-III-Assisted Cascade Signal Amplification Strategy.. *Analytical Chemistry*, **2022**,	7.8	1
43	An all-in-one approach for self-powered sensing: A methanol fuel cell modified with a molecularly imprinted polymer for cancer biomarker detection. *Journal of Electroanalytical Chemistry*, **2022**, 906, 116009	4.1	0
42	Immunotherapy in the Treatment of Advanced Colorectal Cancer. **2022**, 1		
41	The role of microvesicles as biomarkers in the screening of colorectal neoplasm.. *Cancer Medicine*, **2022**,	4.8	
40	Characterization of Lu-DOTA-M5A Anti-Carcinoembryonic Antigen Humanized Antibody and HSP90 Inhibition for Potentiated Radioimmunotherapy of Colorectal Cancer.. *Frontiers in Oncology*, **2022**, 12, 849338	5.3	
39	Importance of Extracellular Vesicle Derived RNAs as Critical Colorectal Cancer Biomarkers. *ACS Bio & Med Chem Au*,		1
38	How to overcome tumor resistance to anti-PD-1/PD-L1 therapy by immunotherapy modifying the tumor microenvironment in MSS CRC.. *Clinical Immunology*, **2022**, 108962	9	1
37	A study on surface plasmon resonance biosensor for the detection of CEA biomarker using 2D materials graphene, Mxene and MoS2. *Optik*, **2022**, 258, 168885	2.5	1
36	Prognostic Significance of Preoperative Serum Carcinoembryonic Antigen Varies with Lymph Node Metastasis Status in Colorectal Cancer.. *Journal of Oncology*, **2021**, 2021, 4487988	4.5	0
35	Diagnostic Applications of Nuclear Medicine: Tumors of the Liver and Biliary Tract. **2022**, 1-26		
34	Prognostic factor of serum carcinoembryonic antigen in colorectal cancer patients: a follow up study. *Al Mustansiriyah Journal of Pharmaceutical Sciences*, **2022**, 21, 1-6		1
33	An Assessment of Physicians' Recommendations for Colorectal Cancer Screening and International Guidelines Awareness and Adherence: Results From a Thai National Survey.. *Frontiers in Medicine*, **2022**, 9, 847361	4.9	
32	Nanotechnology for Cancer Biomarkers. **2022**, 345-365		

31	Diagnostic Applications of Nuclear Medicine: Tumors of the Liver and Biliary Tract. **2022**, 1-26		
30	Antioxidant and Anticarcinogenic Potentials of Propolis for Dimethylhydrazine-Induced Colorectal Cancer in Wistar Rats. *BioMed Research International*, **2022**, 2022, 1-12	3	6
29	Generation of selenium nanoparticles under Irradiation for optical sensing of Carcinoembryonic antigen. *Journal of Molecular Liquids*, **2022**, 361, 119597	6	0
28	Aptamer-Based Biosensors for the Colorimetric Detection of Blood Biomarkers: Paving the Way to Clinical Laboratory Testing. *Biomedicines*, **2022**, 10, 1606	4.8	0
27	Type IV Collagen in Human Colorectal Liver Metastases Cellular Origin and a Circulating Biomarker. *Cancers*, **2022**, 14, 3396	6.6	0
26	Proteomic analysis of low- and high-grade human colon adenocarcinoma tissues and tissue-derived primary cell lines reveals unique biological functions of tumours and new protein biomarker candidates. *Clinical Proteomics*, **2022**, 19,	5	0
25	Fabrication of self-healing magnetic nanoreceptors for glycoprotein via integrating boronate-affinity-oriented and sequential surface imprinting. *Analytica Chimica Acta*, **2022**, 1221, 340108	6.6	
24	miRNAs as cornerstones in colorectal cancer pathogenesis and resistance to therapy: A spotlight on signaling pathways interplay A review. *International Journal of Biological Macromolecules*, **2022**, 214, 583-600	7.9	3
23	In Vitro and In Vivo Antioxidant and Anticancer Potentials of Royal Jelly for Dimethylhydrazine-Induced Colorectal Cancer in Wistar Rats. **2022**, 2022, 1-11		5
22	Laboratory biomarkers in the diagnosis and follow-up of treatment of allergic bronchopulmonary aspergillosis in cystic fibrosis. 1-24		
21	Synergistic diagnostic value of circulating tumor cells and tumor markers CEA/CA19-9 in colorectal cancer. 1-7		0
20	Pyogenic liver abscesses with an elevated carcinoembryonic antigen level. **2022**, 30, 226		0
19	Diagnostic Applications of Nuclear Medicine: Tumors of the Liver and Biliary Tract. **2022**, 865-890		0
18	C. elegans as a Powerful Tool for Cancer Screening. **2022**, 10, 2371		1
17	Electron Transport Study of Hydrogen Peroxide Sensing with 2D Phosphorene and Molybdenum Disulfide. **2022**, 126, 15397-15404		0
16	Advanced stage presentation and its determinant factors among colorectal cancer patients in Amhara regional state Referral Hospitals, Northwest Ethiopia. **2022**, 17, e0273692		0
15	Immunodiagnostics: A Perspective on Sensitivity, Specificity, and Stability of Tumor Antigens. **2022**, 1-28		0
14	Antioxidant and Anticancer Potentials of the Olive and Sesame Mixture against Dimethylhydrazine-Induced Colorectal Cancer in Wistar Rats. **2022**, 2022, 1-12		4

13	A Cross-Sectional and Longitudinal Analysis of Pre-Diagnostic Blood Plasma Biomarkers for Early Detection of Pancreatic Cancer. **2022**, 23, 12969	0
12	Recent advances in transcriptomic biomarker detection for cancer. **2023**, 453-478	0
11	Combining plasmon-enhanced fluorescence with Rayleigh surface acoustic waves to quantify Carcinoembryonic Antigen from human plasma. **2023**, 219, 114822	0
10	Tumor genomic profiling and personalized tracking of circulating tumor DNA in Vietnamese colorectal cancer patients. 12,	0
9	NCK-associated protein 1 regulates metastasis and is a novel prognostic marker for colorectal cancer. **2023**, 9,	0
8	The Influence of Mechanical Bowel Preparation on Volatile Organic Compounds for the Detection of Gastrointestinal DiseaseA Systematic Review. **2023**, 23, 1377	0
7	Research Progress on the Correlation between Serological Markers and Colorectal Cancer. **2023**, 13, 3310-3316	0
6	Establishment of matrix metalloproteinase 3 time-resolved immunoassay and some potential clinical applications. **2023**, 666, 115072	0
5	A Multiple-Array SPRi Biosensor as a Tool for Detection of GynecologicalOncological Diseases. **2023**, 13, 279	0
4	Exploratory Evaluation of Neopterin and Chitotriosidase as Potential Circulating Biomarkers for Colorectal Cancer. **2023**, 11, 894	0
3	Colon cancer transcriptome. **2023**,	0
2	Circular RNAs as the pivotal regulators of epithelial-mesenchymal transition in gastrointestinal tumor cells. **2023**, 245, 154472	0
1	UTP18-mediated p21 mRNA instability drives adenoma-carcinoma progression in colorectal cancer. **2023**, 42, 112423	0