

Supplementary Table S1. The distribution of job position, job title, major of respondents in medical fields

Category	N (%)
Job position	
Student	156(38.05%)
Doctor	151(36.83%)
Nurse	36(8.78%)
Clinical laboratory doctors	3(0.73%)
Pharmacists	5(1.22%)
Teaching staff	15(3.66%)
Administrative staff	11(2.68%)
Researchers in medical fields / postdoctoral	26(6.34%)
Technician	7(1.71%)
Job title	
Primary (not awarded)	30(11.54%)
General Physicians	59(22.69%)
Consultants	89(34.23%)
Chief/Senior physician	82(31.54%)
Work Unit	
Tertiary hospital	154(59.23%)
Secondary hospital	7(2.69%)
Primary hospital/Community health service	59(22.69%)
Private hospital/clinic	5(1.92%)
University/academic institution	28(10.77%)
Government health and disease control unit	2(0.77%)
Other	5(1.92%)
Major	
Medical students without subspecialty	116(28.64%)
Respiratory medicine	2(0.49%)
Digestive medicine	5(1.23%)
Cardiology	4(0.99%)
Department of Nephrology	4(0.99%)
Department of Hematology	1(0.25%)
Endocrinology	1(0.25%)
Department of Rheumatology	1(0.25%)
Department of Neurology	4(0.99%)
Hepatobiliary surgery	5(1.23%)
Gastrointestinal surgery	4(0.99%)
Breast surgery	1(0.25%)
Cardiothoracic surgery	1(0.25%)
Urology	1(0.25%)
Bone surgery	4(0.99%)
Neurosurgery	1(0.25%)
Obstetrics and gynecology	4(0.99%)
Pediatrics	3(0.74%)
Emergency department	4(0.99%)
Stomatology	2(0.49%)

Infectious diseases	1(0.25%)
Dermatology	0
Ophthalmology	148(36.54%)
Otolaryngology	9(2.22%)
Psychiatry	0
Critical Care Medicine	0
Oncology	1(0.25%)
Imaging	4(0.99%)
Laboratory	3(0.74%)
Pathology	5(1.23%)
Others	66(16.3%)

Supplementary Table S2. The distribution of work field, job title in non-medical fields

Category	N (%)
Work/Study field	
Agriculture / Fisheries / Forestry/Mining and mineral, oil and gas extraction	9(3.03%)
Manufacturing (Food/ Clothing/Electric Power Equipment/Paper Products/ Furniture / Home appliances/ Heavy Industry/Car)	47(15.82%)
Pharmaceutical/Bioengineering/Medical Devices/Devices	20(6.73%)
Electricity, gas and water supply/ Transportation and storage/ Logistics	9(3.03%)
Construction industry /Real estate development	15(5.05%)
Wholesale / Retail /Trade / Import and Export	17(5.72%)
Art /Entertainment /Sports	2(0.67%)
Media /Advertising	6(2.02%)
IT /Software and hardware services /Internet operations	60(20.2%)
Bank /Finance/Insurance	11(3.7%)
Law/Accounting/Audit	7(2.36%)
Administrative management /Management /National defense	14(4.71%)
Education / Training / Institution/ Research and Development	61(20.54%)
Others	19(6.4%)
Job title	
Student	66(22%)
Lecturer	63(21%)
Associate professor	84(28%)
Professor	35(11.67%)
No professional title	52(17.33%)

Supplementary Table S3. Perceptions on medical artificial intelligence

	Disagree	Neutral	Agree	p-value (Medical vs. Non-Medical)	p-value (Undergrad or below vs Grad or Phd)	p-value (Female vs. Male)
I have heard of the concept of medical artificial intelligence	25(3.52%)	53(7.46%)	632(89.01%)	0.8791	0.001996	0.4935
I can list at least one practical application scenario	65(9.15%)	160(22.54%)	485(68.31%)	<2.2e-16	1.284e-13	0.2905
I can list three medical specialties	194(27.32%)	284(40%)	232(32.68%)	<2.2e-16	<2.2e-16	0.02261
I can list at least one common algorithm	330(46.48%)	188(26.48%)	192(27.04%)	0.0003445	1.828e-09	0.007062
I have received a course/ training/lecture	400(56.34%)	124(17.46%)	186(26.2%)	0.000005337	3.379e-09	0.02192
I have been involved in research	503(70.85%)	75(10.56%)	132(18.59%)	0.00002045	5.127e-14	0.0001353

Supplementary Table S4. Channels that respondents know medical artificial intelligence (Multiple-choice)

	Medical	Non-Medical
Participating in medical artificial intelligence research	132(32.2%)	52(17.33%)
Academic conferences, special lectures	264(64.39%)	89(29.67%)
Medical artificial intelligence related courses	120(29.27%)	60(20%)
Information from network and social platform	277(67.56%)	247(82.33%)
The artificial intelligence service in the hospital	175(42.68%)	117(39%)
Books, magazines, newspapers	184(44.88%)	180(60%)
TV programs and films	106(25.85%)	155(51.67%)
No understanding at all	29(7.07%)	17(5.67%)
Other	4(0.98%)	0(0%)

Supplementary Table S5. Willingness to participate in medical artificial intelligence teaching activities.

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	p-value (Medical vs. Non-Medical)	p-value (Undergrad or below vs Grad or Phd)	p-value (Female vs. Male)
Interested in medical artificial intelligence	6(0.85%)	14(1.97%)	84(11.83%)	360(50.7%)	246(34.65%)	0.000001857	5.577e-11	0.3187
Willing to acquire general knowledge	5(0.7%)	17(2.39%)	60(8.45%)	329(46.34%)	299(42.11%)	0.0001284	0.0003605	0.5074
Willing to participate in academic lectures and conferences	10(1.41%)	23(3.24%)	72(10.14%)	349(49.15%)	256(36.06%)	6.095e-13	4.067e-08	0.6374
Willing to take courses	8(1.13%)	32(4.51%)	89(12.54%)	306(43.1%)	275(38.73%)	7.992e-09	0.00004449	0.7578
Willing to participate in the research	15(2.11%)	75(10.56%)	115(16.2%)	254(35.77%)	251(35.35%)	2.2e-16	8.646e-10	0.4337
Willing to undertake or assist in the education reform and related work	36(5.07%)	74(10.42%)	151(21.27%)	236(33.24%)	213(30%)	1.162e-08	4.794e-16	0.5635
Current knowledge can support the study of medical artificial intelligence courses	82(11.55%)	126(17.75%)	153(21.55%)	178(25.07%)	171(24.08%)	1.229e-08	1.118e-15	0.002882

Supplementary Table S6. Obstacles in the implementation of medical artificial intelligence teaching activities (multiple-choice)

Medical field	N(%)
Students are not interested	48(11.71%)
Students' basic knowledge of the relevant disciplines is weak, and it is difficult to learn well	237(57.8%)
Students are burdened with heavy workload and have no time to take care of them	175(42.68%)
Lack of teachers in the field of medical artificial intelligence	302(73.66%)
Lack of policy guidance and financial support	194(47.32%)
Medical artificial intelligence is not mature at this stage, and its development prospects are uncertain	127(30.98%)
medical artificial intelligence has potential medical, legal, ethical risks	147(35.85%)
The prospects of medical artificial intelligence talent employment are not positive	20(4.88%)
Others	5(1.22%)
Non-Medical field	N(%)
Students are not interested	55(18.33%)
Students believe that they are not related to their academic fields	159(53%)
Students' basic knowledge of the relevant disciplines is weak, and it is difficult to	184(61.33%)
Students are burdened with heavy workload and have no time to take care of them	124(41.33%)
Lack of teachers in the field of medical artificial intelligence	186(62%)
Lack of policy guidance and financial support	143(47.67%)
Medical artificial intelligence is not mature at this stage, and its development pros	132(44%)
Medical artificial intelligence has potential medical, legal, ethical risks	109(36.33%)
The prospects of medical artificial intelligence talent employment are not positive	34(11.33%)
Others	3(1%)

Supplementary Table S7. Medical artificial intelligence teaching form/content

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	p-value (Medical vs. Non-Medical)	p-value (Undergrad or below vs. Grad or Phd)	p-value (Female vs. Male)
Medical college should offer medical artificial intelligence courses	8(1.13%)	13(1.83%)	78(10.99%)	319(44.93%)	292(41.13%)	0.877	0.001429	0.001429
Universities should encourage research projects on medical artificial intelligence	6(0.85%)	7(0.99%)	51(7.18%)	329(46.34%)	317(44.65%)	0.06464	0.08205	0.08205
Supervisors in medicine and science professions can cooperate to cultivate PhD Students	8(1.13%)	9(1.27%)	52(7.32%)	345(48.59%)	296(41.69%)	0.0335	0.0005918	0.0005918
Medical artificial intelligence should be set as an independent subject in universities in the future	12(1.69%)	20(2.82%)	124(17.46%)	291(40.99%)	263(37.04%)	0.5424	0.02412	0.02412
VR (virtual reality) technology shows the anatomic features of disease and is beneficial to medical teaching	3(0.42%)	15(2.11%)	57(8.03%)	300(42.25%)	335(47.18%)	0.00427	0.006617	0.006617
5G+ Internet can assist remote connections between students and teachers, which is beneficial to medical teaching	8(1.13%)	7(0.99%)	47(6.62%)	315(44.37%)	333(46.9%)	0.03148	0.05925	0.05925

Supplementary Table S8. McNemar Test on if medical artificial intelligence would impact respondents when they were ranking top 3 future profession

Profession	Rank	Not considering	Consider the influence	p-value
Clinical service guiding, care workers	1st	24	63	< 2.2e-16
Clinical service guiding, care workers	2nd	3	5	< 2.2e-16
Clinical service guiding, care workers	3rd	4	5	< 2.2e-16
Nursing staff	1st	15	9	< 2.2e-16
Nursing staff	2nd	15	16	< 2.2e-16
Nursing staff	3rd	5	7	< 2.2e-16
Clinical laboratory doctors	1st	7	21	< 2.2e-16
Clinical laboratory doctors	2nd	14	33	< 2.2e-16
Clinical laboratory doctors	3rd	9	22	< 2.2e-16
Medical technicians	1st	18	14	< 2.2e-16
Medical technicians	2nd	14	17	< 2.2e-16
Medical technicians	3rd	13	15	< 2.2e-16
Pharmacist	1st	4	5	< 2.2e-16
Pharmacist	2nd	9	16	< 2.2e-16
Pharmacist	3rd	11	16	< 2.2e-16
Medical related administrative staff	1st	22	26	< 2.2e-16
Medical related administrative staff	2nd	28	21	< 2.2e-16
Medical related administrative staff	3rd	45	41	< 2.2e-16
Surgeon	1st	118	101	< 2.2e-16
Surgeon	2nd	58	47	< 2.2e-16
Surgeon	3rd	45	37	< 2.2e-16
Medical imaging doctor	1st	8	15	< 2.2e-16
Medical imaging doctor	2nd	17	22	< 2.2e-16
Medical imaging doctor	3rd	23	27	< 2.2e-16
Pathologist	1st	6	2	< 2.2e-16
Pathologist	2nd	11	18	< 2.2e-16
Pathologist	3rd	25	27	< 2.2e-16
Dermatologist	1st	12	13	< 2.2e-16
Dermatologist	2nd	19	16	< 2.2e-16
Dermatologist	3rd	21	14	< 2.2e-16
Ophthalmologist	1st	101	79	< 2.2e-16
Ophthalmologist	2nd	86	89	< 2.2e-16
Ophthalmologist	3rd	36	30	< 2.2e-16
Physician	1st	37	26	< 2.2e-16
Physician	2nd	46	53	< 2.2e-16
Physician	3rd	52	45	< 2.2e-16
Obstetrician and Gynecologist	1st	7	8	< 2.2e-16
Obstetrician and Gynecologist	2nd	24	13	< 2.2e-16
Obstetrician and Gynecologist	3rd	22	20	< 2.2e-16
Pediatrician	1st	3	3	< 2.2e-16
Pediatrician	2nd	6	8	< 2.2e-16
Pediatrician	3rd	23	23	< 2.2e-16
Researchers in medical related fields	1st	27	22	< 2.2e-16
Researchers in medical related fields	2nd	58	35	< 2.2e-16
Researchers in medical related fields	3rd	67	74	< 2.2e-16
Other	1st	1	3	< 2.2e-16
Other	2nd	2	1	< 2.2e-16
Other	3rd	9	7	< 2.2e-16

Supplementary Table S9. Score table of ranking the top 3

	Not consider (N)	Consider (N)
Surgeon	515	434
Ophthalmologist	511	445
Researchers in medical related fields	264	210
Physician	255	229
Medical related administrative staff	167	161
Medical technicians	95	91
Dermatologist	95	85
Obstetrician and Gynecologist	91	70
Clinical service guiding, care workers	82	204
Medical imaging doctor	81	116
Nursing staff	80	66
Pathologist	65	69
Clinical laboratory doctors	57	130
Pediatrician	44	48
Pharmacist	41	63
Other	16	18