

**Supplementary Table 1 The top 10 most published countries in the field of anaesthetic management for painless gastroenteroscopy in elderly individuals from 2004 to 2023**

Country	Counts	Centrality	<i>n</i> = 714 (%)	Citations	H-index
Usa	181	0.39	25.35	4093.00	48
China	112	0.07	12.325	1523.00	35
Japan	52	0.01	7.283	1208.00	32
South Korea	50	0.00	7.003	699.00	23
United Kingdom	44	0.06	6.022	1067.00	31
Germany	42	0.17	5.462	1727.00	31
Turkey	39	0.00	5.462	491.00	19
Italy	33	0.07	4.622	1257.00	33
Spain	31	0.01	4.342	812.00	25
Canada	26	0.06	3.641	600.00	27

**Supplementary Table 2 The top 10 most published institutions in the field of anaesthetic management for painless gastroenteroscopy in elderly individuals from 2004 to 2023**

<b>Affiliations</b>	<b>Record Count</b>	<b><i>n</i> = 714 (%)</b>	<b>Citations</b>
Harvard University	17	2.381	141
Cleveland Clinic Foundation	16	2.241	245
Us Department of Veterans Affairs	14	1.961	196
Veterans Health Administration Vha	14	1.961	177
Harvard Medical School	12	1.681	164
University of California System	11	1.541	323
University of Antwerp	10	1.401	123
Shanghai Jiao Tong University	9	1.261	203
University of Pennsylvania	9	1.261	63
University of Toronto	9	1.261	228

**Supplementary Table 3 The top 10 most active journals in this field**

<b>Journal</b>	<b>Counts</b>	<b><i>n</i> = 714 (%)</b>	<b>IF</b>	<b>JCR</b>	<b>H-index</b>	<b>Citations</b>
----------------	---------------	---------------------------	-----------	------------	----------------	------------------

---

<i>Gastrointestinal Endoscopy</i>	42	5.882	7.7	Q1	26	1913
<i>Digestive Diseases and Sciences</i>	26	3.641	3.1	Q2	11	305
<i>Endoscopy</i>	26	3.641	9.3	Q1	20	1207
<i>World Journal of Gastroenterology</i>	23	3.221	4.3	Q2	14	635
<i>European Journal of Gastroenterology &amp; Hepatology</i>	19	2.661	2.1	Q4	13	320
<i>American Journal of Gastroenterology</i>	16	2.241	9.8	Q1	14	1037
<i>Surgical Endoscopy and Other Interventional Techniques</i>	15	2.101	3.1	Q1	8	275
<i>BMC Gastroenterology</i>	14	1.961	2.4	Q4	9	204
<i>Scandinavian Journal of Gastroenterology</i>	14	1.961	1.9	Q4	7	221
<i>Journal of Clinical Gastroenterology</i>	12	1.681	2.9	Q3	8	210

---

**Supplementary Table 4 The top 10 most published authors in the field of anaesthetic management for painless**

**gastroenteroscopy in elderly individuals from 2004 to 2023**

<b>Authors</b>	<b>Record count</b>	<b><i>n</i> = 714 (%)</b>	<b>H-index</b>	<b>Citations</b>
Hassan, Cesare	7	0.98	6	178
Bretthauer, Michael	7	0.98	6	178
Amornyotin, Somchai	6	0.84	5	260
Capasso, Robson	6	0.84	5	260
Armstrong, David	6	0.84	5	102
Kuipers, Ernst J	6	0.84	6	196
Howard, Christopher W	5	0.7	5	77
Heller, Benjamin J	5	0.7	4	105
Lieber, Sarah R	5	0.7	3	64
Crockett, Seth	5	0.7	4	266

**Supplementary Table 5 The top 10 most frequently used keywords in this field**

<b>Rank</b>	<b>Keywords</b>	<b>Occurrences</b>
1	colonoscopy	237

2	sedation	210
3	propofol	173
4	endoscopy	163
5	midazolam	119
6	conscious sedation	107
7	gastrointestinal endoscopy	99
8	safety	92
9	upper gastrointestinal endoscopy	91
10	anesthesia	86

**Supplementary Table 6 The top 10 most co-cited references in anaesthetic management for painless gastroenteroscopy in elderly individuals research from 2004 to 2023**

Rank	Title	First author	Year	Journal
1	Differences in systemic opioid use do not explain increased fever incidence in parturients receiving epidural analgesia	Gross JB	2002	<i>Anesthesiology</i>

---

2	Endoscopic sedation in the United States: results from a nationwide survey	Cohen LB	2006	<i>American Journal of Gastroenterology</i>
3	A systematic review and meta-analysis of randomized, controlled trials of moderate sedation for routine endoscopic procedures	Mcquaid KR	2008	<i>Gastrointestinal Endoscopy</i>
4	AGA Institute review of endoscopic sedation	Cohen LB	2007	<i>Gastroenterology</i>
5	Propofol versus midazolam/meperidine for outpatient colonoscopy: administration by nurses supervised by endoscopists	Sipe BW	2002	<i>Gastrointestinal Endoscopy</i>
6	Gastroenterologist-administered propofol versus meperidine and midazolam for advanced upper endoscopy: a prospective, randomized trial	Vargo JJ	2002	<i>Gastroenterology</i>
7	Sedation and anesthesia in GI endoscopy	Lichtenstein DR	2008	<i>Gastrointestinal Endoscopy</i>
8	A national study of cardiopulmonary	Sharma VK	2007	<i>Gastrointestinal</i>

---

---

	unplanned events after GI endoscopy			<i>Endoscopy</i>
9	Endoscopist-directed administration of propofol: a worldwide safety experience	Rex DK	2009	<i>Gastroenterology</i>
10	Trained registered nurses/endoscopy teams can administer propofol safely for endoscopy	Rex DK	2005	<i>Gastroenterology</i>

---