

# Dr. Georg Wenzel

Consultant Gastroenterologist

|                  |                                                                                                                                                                 |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RECORD           | 9 Aug 2022 – 24 Jul 2026<br>Cannulation 87.8% over all 286 eligible cases; 4 events at their scheme’s highest tier in 520 recorded procedures since 9 Aug 2022. |
| PROCEDURES       | 520 cases                                                                                                                                                       |
| REPORTING PERIOD | The last 100 consecutive procedures · 5 Jul 2025 – 24 Jul 2026 · 100 cases                                                                                      |
| ASSESSED AGAINST | The ESGE performance measures for ERCP (2018)                                                                                                                   |
| PREPARED FOR     | A yearly appraisal, from the endoscopist’s own record. It is not a comparison with other endoscopists, and no one else observed these cases.                    |

| MEASURE                  | CASES                                                                                  | RATE  | 95%<br>INTERVAL          | MINIMUM | TARGET                   | EARLIER PERIOD<br>15 Jun 2024 – 4 Jul<br>2025 |
|--------------------------|----------------------------------------------------------------------------------------|-------|--------------------------|---------|--------------------------|-----------------------------------------------|
| Cannulation              | 58 of 61                                                                               | 95.1% | 86.5 – 98.3 <sup>†</sup> | ≥90%    | ≥95% (in expert centers) | 90.0%, 99 of 110<br>(83.0 – 94.3)             |
| • At target              | native papilla, normal anatomy                                                         |       |                          |         |                          |                                               |
| Stone clearance          | 28 of 30                                                                               | 93.3% | 78.7 – 98.2 <sup>†</sup> | ≥90%    | ≥95% (in expert centers) | 90.7%, 39 of 43<br>(78.4 – 96.3)              |
| • Meets the minimum      | stones under 10 mm after successful selective cannulation                              |       |                          |         |                          |                                               |
| Stenting below the hilum | 25 of 27                                                                               | 92.6% | 76.6 – 97.9 <sup>†</sup> | ≥95%    | No higher target set     | 85.1%, 40 of 47<br>(72.3 – 92.6)              |
| • Below the minimum      | a stricture or retained stones below the hilum, after successful selective cannulation |       |                          |         |                          |                                               |
| Post-ERCP pancreatitis   | 4 of 81                                                                                | 4.9%  | 1.9 – 12.0 <sup>†</sup>  | <10%    | <5%                      | 3.4%, 6 of 174<br>(1.6 – 7.3)                 |
| • At target              | native anatomy, outcome reviewed                                                       |       |                          |         |                          |                                               |
| Antibiotic prophylaxis   | 27 of 30                                                                               | 90.0% | 74.4 – 96.5 <sup>†</sup> | ≥90%    | ≥95%                     | 85.7%, 48 of 56<br>(74.3 – 92.6)              |
| • Meets the minimum      | cases where prophylaxis was indicated                                                  |       |                          |         |                          |                                               |

The earlier period is shown for context. This document tests no difference between the two.

† The interval crosses the published figure, so this record cannot show which side of it the rate lies on. The verdict reports the measured rate.

Every verdict but At target is read against the minimum standard. At target says the target standard is reached as well.

Discussed at appraisal on \_\_\_\_\_ with \_\_\_\_\_.

Signed by the endoscopist \_\_\_\_\_ Date \_\_\_\_\_

# Scope of practice and case mix

The 100 recorded cases, by indication, difficulty and treatment.

|                                            |             |       |
|--------------------------------------------|-------------|-------|
| INDICATION                                 |             |       |
| Biliary stones and infection, 47           | <div></div> | 47.0% |
| Malignant or indeterminate obstruction, 20 | <div></div> | 20.0% |
| Benign stricture and bile leak, 18         | <div></div> | 18.0% |
| Access and procedural, 8                   | <div></div> | 8.0%  |
| Pancreatic, 7                              | <div></div> | 7.0%  |

100 recorded cases, none without an indication

|                                              |             |       |
|----------------------------------------------|-------------|-------|
| PROCEDURAL DIFFICULTY, ASGE COMPLEXITY GRADE |             |       |
| Grade 1, 16                                  | <div></div> | 16.0% |
| Grade 2, 44                                  | <div></div> | 44.0% |
| Grade 3, 28                                  | <div></div> | 28.0% |
| Grade 4, 7                                   | <div></div> | 7.0%  |
| Not graded, 5                                | <div></div> | 5.0%  |

|                                   |             |       |
|-----------------------------------|-------------|-------|
| BASIC AND ADVANCED ERCP           |             |       |
| Basic ERCP, grades 1 and 2, 60    | <div></div> | 60.0% |
| Advanced ERCP, grades 3 and 4, 35 | <div></div> | 35.0% |

|                                                           |             |   |
|-----------------------------------------------------------|-------------|---|
| THERAPEUTIC EXPOSURE, PROCEDURES INCLUDING EACH MECHANISM |             |   |
| Mechanical lithotripsy                                    | <div></div> | 5 |
| Electrohydraulic lithotripsy                              | <div></div> | 2 |
| Minor papilla therapy                                     | <div></div> | 3 |

of the 100 recorded cases

No recorded case names any of the other 14 mechanisms.

|                                     |    |
|-------------------------------------|----|
| CASES BEHIND THE MEASURES           |    |
| Native-papilla cannulation          | 61 |
| Stone clearance, stones under 10 mm | 30 |
| Stenting below the hilum            | 27 |

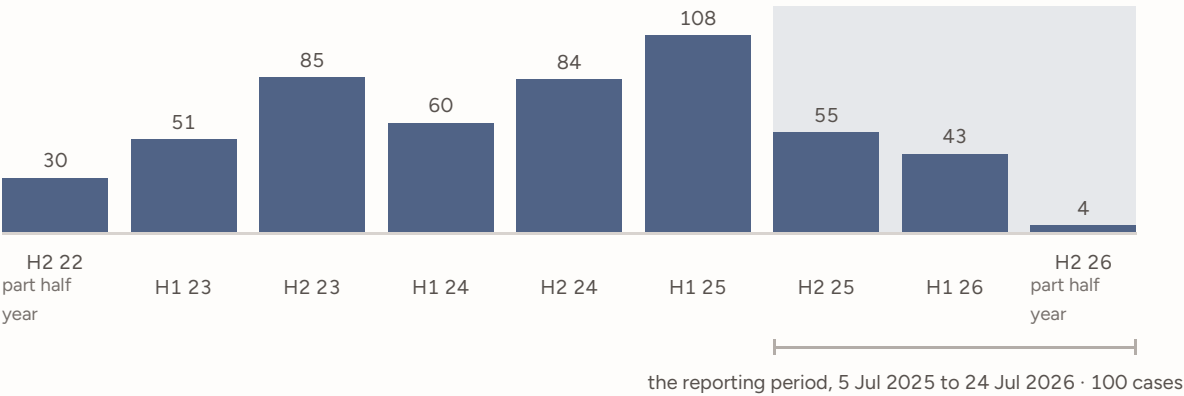
The three rows overlap.

CANNULATION BY DIFFICULTY GRADE

| GRADE   | CASES    | RATE  | 95% INTERVAL |
|---------|----------|-------|--------------|
| Grade 1 | 8 of 10  |       |              |
| Grade 2 | 31 of 32 | 96.9% | 84.3 – 99.4  |
| Grade 3 | 14 of 14 |       |              |
| Grade 4 | 1 of 1   |       |              |

Each grade is counted on its own. No rate here is adjusted for the mix of grades. No grade carries a published figure of its own.

CASES PER HALF YEAR, OVER THE WHOLE RECORD

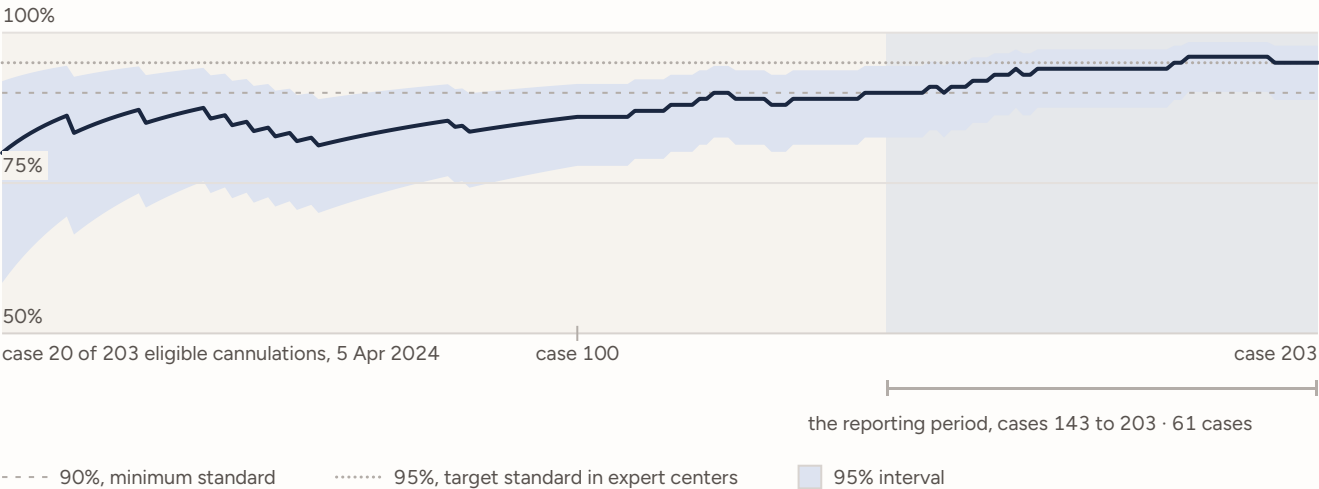


## Watching for drift

The first chart follows the cannulation rate over the last 100 cases. The other two run upward when things go wrong and drain back toward zero when they go well. A score held at the bottom is a practice holding steady; a score climbing toward the line is a run of cases worth reading again.

CANNULATION RATE, LAST 100 CASES

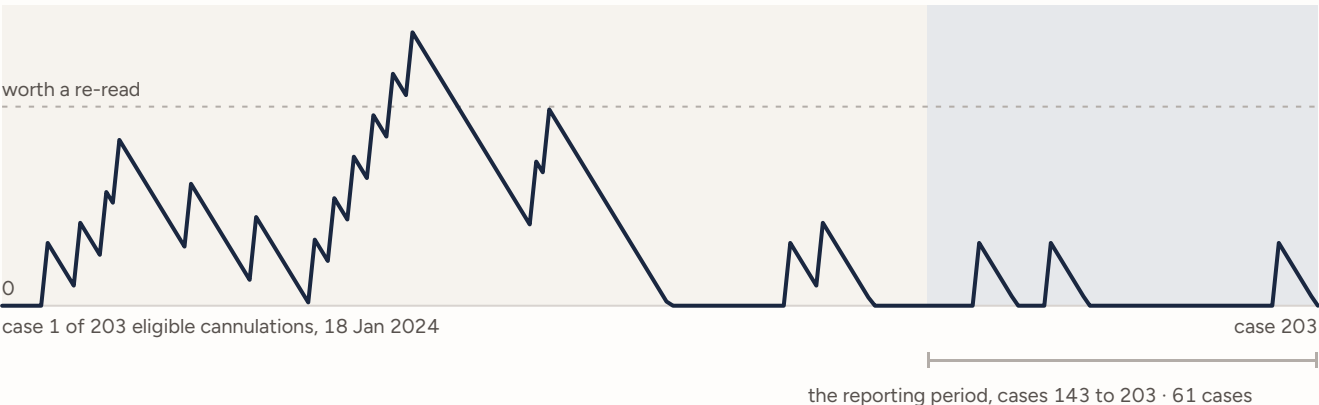
The last 100 eligible cannulations: 95.0%, 95 of 100, above the 90% minimum standard.



Each point is the rate over the last 100 eligible cannulations up to it or, before case 100, over every case so far. The line starts at case 20, where a rate first prints.

CANNULATION DRIFT

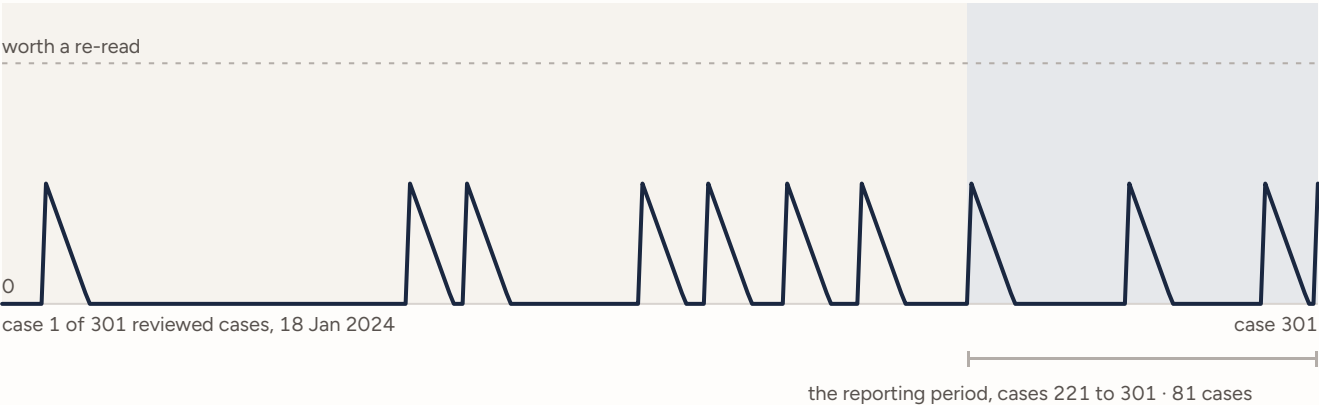
The line was reached on 2 Nov 2024, before this period began. It was not reached again during the period.



203 eligible cases since 15 Jan 2024, the start of independent practice as the endoscopist set it. 83 earlier cases are not counted.

POST-ERCP PANCREATITIS, EARLY WARNING

The line was not reached.



301 eligible cases since 15 Jan 2024, the start of independent practice as the endoscopist set it. 150 earlier cases are not counted.

Adverse events

100 cases recorded; 100 reached endoscopy; 91 of those have a reviewed outcome; of those, 81 with native anatomy are eligible for the pancreatitis rate.

| EVENT                                                                                  | CASES                       | RATE | 95% INTERVAL |
|----------------------------------------------------------------------------------------|-----------------------------|------|--------------|
| Post-ERCP pancreatitis                                                                 | 4 of 81 eligible cases      | 4.9% | 1.9 – 12.0   |
| Revised Atlanta classification (2012): 1 mild · 2 moderately severe · 1 not yet graded |                             |      |              |
| Bleeding                                                                               | 1 of 91 reviewed procedures | 1.1% | 0.2 – 6.0    |
| 2010 ASGE lexicon: 1 moderate                                                          |                             |      |              |
| Perforation                                                                            | 1 of 91 reviewed procedures | 1.1% | 0.2 – 6.0    |
| Stapfer type: 1 of type III, distal bile duct injury                                   |                             |      |              |
| 2010 ASGE lexicon: 1 moderate                                                          |                             |      |              |
| Cholangitis                                                                            | 2 of 91 reviewed procedures | 2.2% | 0.6 – 7.7    |
| Tokyo Guidelines 2018: 2 Grade I                                                       |                             |      |              |

STILL OPEN

|                                   |                             |
|-----------------------------------|-----------------------------|
| Outcome not yet reviewed          | 9 of 100 reaching endoscopy |
| Recorded, severity not yet graded | 1 of 8 recorded events      |

9 cases have no recorded outcome review and are held out of every rate here.

# What the record does not hold

| MISSING                       | CASES | EFFECT                                              |
|-------------------------------|-------|-----------------------------------------------------|
| Outcome never reviewed        | 8     | removes the case from every rate                    |
| Recorded event not yet graded | 1     | counted in its rate, absent from the severity split |
| Rectal NSAID never recorded   | 14    | no measure here reads it                            |

57 of 100 cases entered on the day of the procedure, 42 within a week, 1 later.

This counts fields missing inside recorded cases. It cannot count cases that were never recorded.

# How to read this document

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DATA        | Every figure is computed from the endoscopist's own entries. Nothing is imported and nothing is estimated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| BASES       | <p>Each measure is counted over its own eligible cases, which its row names. A case outside a measure's eligible set is not counted against it. Basic and advanced ERCP are the two stages of the ESGE curriculum for ERCP training (2021), read off the ASGE grade: 1 and 2, 3 and 4.</p> <p>The performance measures state that they are not guidelines but guidance on how quality can be monitored, carrying no legal implications.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| INTERVAL    | Every rate carries a 95% confidence interval (Wilson), which is the range the true rate would sit in were these cases a sample of the same practice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| FLOOR       | A rate prints from 20 eligible cases. Under that the row states its count and nothing else.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CONVENTIONS | Rates print to one decimal. A date range includes both of its days.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| THE RECORD  | Read once, on the date in the footer, over the cases recorded 9 Aug 2022 to 24 Jul 2026. This document offers no external check: nobody else observed these cases and nobody else has countersigned this page. Entries can be corrected or removed after the case; this document carries no history of changes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MONITORING  | <p>Cannulation drift chart. Each success takes 0.12 off the score; each unsuccessful case adds 0.69, about what six successes take off. The line sits at 2.20: four unsuccessful cases from zero with none between them. A score at the line means the cases behind it are nine times more likely at a rate of 80% than at 90%. The spacing, the line and the 10% one-sided error rate it is designed at are Wani 2016's, and a long record crosses by chance more readily than a short one. The score never falls below zero, so a good run banks no credit. The 90% is the ESGE minimum standard, and a rate steady between 80% and 90% barely moves the score.</p> <p>Post-ERCP pancreatitis, early warning. Each reviewed case without pancreatitis takes 0.11 off the score; each pancreatitis adds 1.10, about what ten clean cases take off. The line sits at 2.20: two pancreatitis cases from zero with none between them. A score at the line means the cases behind it are nine times more likely at a rate of 15% than at 5%, and the line is designed at a one-sided error rate of 10%. The 5% is the ESGE target standard; the two rates, the spacing and the error rate are a convention of this document, not a published standard.</p> |

**ADVERSE EVENTS** Post-ERCP pancreatitis is new or worsened abdominal pain with amylase or lipase more than three times the normal value at more than 24 hours after the procedure, requiring admission or a longer stay than planned. Bleeding is hematemesis or melena, or a hemoglobin drop of more than 2 g/dL. Perforation is gas or luminal contents outside the gastrointestinal tract on imaging. Cholangitis is a new temperature above 38 °C for more than 24 hours with cholestasis.

An event counts here only where it is attributable to the procedure and occurs within 14 days of it. Events that neither interfered with the planned procedure nor changed the patient's care are not counted.

Pancreatitis is graded by the revised Atlanta classification (2012); bleeding and perforation by the 2010 ASGE lexicon, with perforation also given its Stapfer type; cholangitis by the Tokyo Guidelines 2018.

**VERSION** 0.2.0 · ESGE2018.cannulation.v5 · ESGE2018.stone-extraction-small.v4 · ESGE2018.subhilar-stent.v7 · ESGE2018.post-ercp-pancreatitis.v1 · ESGE2018.antibiotic-prophylaxis.v1

## SOURCES

Banks PA, Bollen TL, Dervenis C, et al. Classification of acute pancreatitis — 2012: revision of the Atlanta classification and definitions by international consensus. *Gut* 2013;62:102-111. PMID 23100216.

Cotton PB, Eisen GM, Aabakken L, et al. A lexicon for endoscopic adverse events: report of an ASGE workshop. *Gastrointest Endosc* 2010;71:446-454. PMID 20189503.

Cotton PB, Eisen G, Romagnuolo J, et al. Grading the complexity of endoscopic procedures: results of an ASGE working party. *Gastrointest Endosc* 2011;73:868-874. PMID 21377673.

Domagk D, Oppong KW, Aabakken L, Czako L, Gyökeres T, Manes G, Meier P, Poley JW, Ponchon T, Tringali A, Bellisario C, Minozzi S, Senore C, Bennett C, Bretthauer M, Dinis-Ribeiro M, Hassan C, Kaminski MF, Rees CJ, Spada C, Valori R, Bisschops R, Rutter MD. Performance measures for ERCP and endoscopic ultrasound: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2018;50:1116-1127. DOI 10.1055/a-0749-8767.

Dumonceau JM, Kapral C, Aabakken L, et al. ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2020;52:127-149. PMID 31863440.

Johnson G, Webster G, Boškoski I, et al. Curriculum for ERCP and endoscopic ultrasound training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy* 2021;53:1071-1087. PMID 34293177.

Kiriyama S, Kozaka K, Takada T, et al. Tokyo Guidelines 2018: diagnostic criteria and severity grading of acute cholangitis (with videos). *J Hepatobiliary Pancreat Sci* 2018;25:17-30. PMID 29032610.

Stapfer M, Selby RR, Stain SC, et al. Management of duodenal perforation after endoscopic retrograde cholangiopancreatography and sphincterotomy. *Ann Surg* 2000;232:191-198. PMID 10903596.

Wani S, Hall M, Wang AY, et al. Variation in learning curves and competence for ERCP among advanced endoscopy trainees by using cumulative sum analysis. *Gastrointest Endosc* 2016;83:711-719. DOI 10.1016/j.gie.2015.10.022.