STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No.	Recommendation	Page No.	Relevant text from manuscript
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	The Title/Abstract section on page 1.	The title explicitly labels the study as A retrospective clinical controlled study; the abstract elaborates on the research following the design of a retrospective clinical controlled trial
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	The Abstract section on page 1.	Abstract: Background: Acute upper gastrointestinal bleeding (AUGIB) is a critical clinical condition with high morbidity and mortality, necessitating effective therapeutic interventions. Objectives: This study retrospectively investigated the efficacy of tranexamic acid combined with octreotide (OCT) in patients with high risk of AUGIB. Methods: A total of 183 patients with UGIB were initially enrolled, and 170 eligible patients were finally included and divided into an OCT group (n=83) and a TXA + OCT group (n=87). The main indicators compared were: drug onset time, hemostasis time, upper gastrointestinal bleeding volume, blood routine, coagulation function and clinical effective rate; secondary indicators: clinical efficacy, visual analogue scale (VAS) and adverse reactions. Results: After treatment, the onset time, hemostasis time, bleeding volume, coagulation function indexes (PT, TT, APTT and Fib) and VAS in TXA group and OCT group were significantly lower than those in OCT group. The clinical effective rate and hemoglobin, red blood cell and platelet count in TXA group and OCT group were significantly higher than those in OCT group (P<0.05). There were no significant differences in the average blood transfusion volume, hospitalization time, rebleeding rate within 3 days, surgical intervention needs and mortality between the two groups (P>0.05), but the combined group had a slight advantage. In addition, combination therapy did not increase the incidence of adverse reactions. Conclusion: These findings provide valuable clinical evidence supporting the use of tranexamic acid in combination with octreotide for AUGIB.
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	The Introduction section on page 1-2.	Acute upper gastrointestinal bleeding (AUGIB) is an acute bleeding lesion in the digestive tract (including esophagus, stomach, duodenum and biliary and pancreatic systems) above the Treitz ligament. It is a common cause of emergency department admissions. The clinical manifestations are

				hematemesis and melena. In severe cases, peripheral circulation failure and even shock can occur (Abrishami *et al*., 2020; Wasserman *et al*., 2024). There are many different causes of AUGIB, esophagitis, esophageal varices, peptic ulcer disease, duodenitis, Mallory-Weiss tear, etc. These causes vary from country to country, even in the same country. Peptic ulcer bleeding is the most common (40-50 %) and may be very serious in patients with esophageal varices (Akhtar *et al*., 2023; Long and Gottlieb, 2024). UGIB is a relatively common medical emergency, with a mortality rate of 2-16 %, of which 80 % -90 % of UGIB belongs to non-variceal UGIB (Akhtar *et al*., 2023; Gupta and Gupta, 2022; L. Yang, 2022). Emergency endoscopy can significantly reduce the incidence and mortality of AUGIB by quickly locating the location and cause of bleeding and effectively managing bleeding activities and distinguishing high-risk and low-risk patients (Benedeto-Stojanov *et al*., 2022). At present, the treatment of UGIB includes endoscopy, drugs (such as vasopressin, somatostatin and proton pump inhibitors, etc), angiography and surgical treatment. The core goal is to stop bleeding, stabilize hemodynamics and prevent rebleeding (Lee and Cho, 2024). Most patients can effectively control bleeding through drug therapy and endoscopic treatment and about 5 % -15 % of patients fail to stop bleeding under endoscopy and need interventional or surgical treatment (Yang, 2022). Octreotide (OCT), as a synthetic somatostatin analogue,has shown promise in patients with gastrointestinal bleeding, especially in reducing rebleeding rate and improving overall clinical outcomes (Papantoniou *et al*., 2025; Peng and Chang, 2024; Yang *et al*., 2025). Compared with natural somatostatin, the half-life of octreotide is significantly prolonged, which makes it have important application value in clinical treatment (Debnath and Cheriyath, 2025; Mas *et al*., 2022). In recent years, with the deepening of research, octreotide has shown new therapeutic potential in the treatment of UGIB. However, compared with traditional drugs such as pituitrin, octreotide also has certain limitations, such as high cost and limited route of administration. Tranexamic Acid (TXA) is a synthetic anti-fibrinolytic drug that helps to reduce postoperative bleeding and traumatic bleeding (Grocott *et al*., 2022; Prudovsky *et al*., 2022). In view

				of its exact efficacy and good safety, the drug has been included in the WHO standard list of essential drugs and has been clinically recommended by several international authoritative guidelines (Lee *et al*., 2021). Existing evidence shows that TXA has a significant hemostatic effect across a variety of surgical procedures, effectively minimizing intraoperative blood loss and substantially improving survival rates in obstetric and traumatic hemorrhage. In the clinical management of UGIB, the use of TXA has been shown to reduce mortality risk and the need for surgical intervention. However, some gastrointestinal bleeding studies have shown that TXA has not shown significant clinical benefits and TAX has not been listed as a blood routine treatment drug for gastrointestinal bleeding in clinical practice (Colomina *et al*., 2022; Faraoni and Fenger-Eriksen, 2024; Lee *et al*., 2021). The combination of octreotide and tranexamic acid shows a synergistic advantage in the treatment of UGIB, as octreotide reduces rebleeding risk and tranexamic acid enhances hemostasis via antifibrinolysis. However, clinical evidence remains insufficient.
Objectives	3	State specific objectives, including any prespecified hypotheses	The Introduction section on page 2.	This study aims to clarify the efficacy and safety of this combination regimen in high-risk UGIB patients, thereby providing further support for its clinical application.
Methods				
Study design	4	Present key elements of study design early in the paper	The Subjects section in Materials and Methods on page 2.	This study used a clinical retrospective analysis method to include 183 patients with UGIB who were admitted from May 2021 to November 2023. After preliminary screening, patients with specific diseases and an inability to communicate effectively were excluded according to the exclusion criteria. Finally, a total of 170 eligible patients were included in the study and divided into two groups: octreotide monotherapy group (OCT group, n = 83) and combination therapy group (TXA + OCT Group, n = 87). In addition to conventional treatment, patients in the OCT group were only treated with octreotide, while patients in the TXA + OCT group were treated with tranexamic acid combined with octreotide.
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	The Subjects section in Materials and Methods on page 2.	This study used a clinical retrospective analysis method to include 183 patients with UGIB who were admitted from May 2021 to November 2023. The information of AUGIB patients was collected according to the electronic medical record

				information of Baoding People's Hospital.
Participants	6	(*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up *Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants	The Subjects section and Inclusion and exclusion criteria section in Materials and Methods on page 2.	This study used a clinical retrospective analysis method to include 183 patients with UGIB who were admitted from May 2021 to November 2023. After preliminary screening, patients with specific diseases and an inability to communicate effectively were excluded according to the exclusion criteria. Finally, a total of 170 eligible patients were included in the study. *Inclusion criteria*: (1) Patients with UGIB according to the guidelines and combined with clinical features and endoscopic findings ; (2) symptoms of hematemesis, black stool or tarry stool ; (3) According to the guidelines and combined with clinical features, endoscopic findings and scoring system, the patients were comprehensively judged as high-risk patients ; (4) 18 to 80 years old. *Exclusion criteria*: (1) Patients with congestive heart failure; (2) Patients with end-stage renal disease who received hemodialysis; (3) pregnant or lactating women; (4) patients with acute coronary events; (5) Patients taking anticoagulants and patients with coagulation disorders; (6) Patients taking contraceptives, history of stroke, DVT and retinal vein or artery occlusion; (7) Patients with mental illness such as schizophrenia and acute manic episodes and unable to communicate normally.
		(*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed *Case-control study*—For matched studies, give matching criteria and the number of controls per case	The Subjects section in Materials and Methods on page 2.	Finally, a total of 170 eligible patients were included in the study and divided into two groups: octreotide monotherapy group (OCT group, n = 83) and combination therapy group (TXA + OCT Group, n = 87).
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	The Subjects section, Inclusion and exclusion criteria section and Data collection section in Materials and Methods on page 2-3.	In addition to conventional treatment, patients in the OCT group were only treated with octreotide, while patients in the TXA + OCT group were treated with tranexamic acid combined with octreotide. The information of AUGIB patients was collected according to the electronic medical record information of Baoding People's Hospital. The Primary indicators were compared: drug onset time, hemostasis time, upper gastrointestinal bleeding volume, blood routine, coagulation function and clinical effective rate; and secondary indicators: clinical outcome, visual analogue scale (VAS) and adverse reactions. *Inclusion criteria*: (1) Patients with UGIB according to the

				guidelines and combined with clinical features and endoscopic findings ; (2) symptoms of hematemesis, black stool or tarry stool ; (3) According to the guidelines and combined with clinical features, endoscopic findings and scoring system, the patients were comprehensively judged as high-risk patients ; (4) 18 to 80 years old. The Glasgow-Blatchford Score (GBS) is a validated risk assessment tool used to evaluate the severity and predict outcomes in patients with UGIB. A GBS greater than 6 indicates the need for blood transfusion and emergency hospitalization. AIMS65 is a clinical scoring system used to assess the risk of mortality, need for transfusion, and rebleeding in patients with UGIB and a score of ≥ 2 is a high risk.
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	The Data collection section, Drug onset time, hemostasis time and upper gastrointestinal bleeding volume section, Clinical effectiveness rates section and Comparison of clinical outcomes section in Materials and Methods on page 2-3.	Patient information was collected based on electronic cases, including patient gender, age, BMI, smoking history, drinking history, causes and risk scores of UGIB, visual analogue scale (VAS) of pain and adverse reactions. Blood routine: hemoglobin level, red blood cell count, platelet count, coagulation function: prothrombin time (PT), thrombin time (TT), activated partial thromboplastin time (APTT), fibrinogen (FIB) and other information. According to the electronic medical records of Baoding People's Hospital, the information on drug onset time, hemostasis time, and upper gastrointestinal bleeding volume was calculated (Zhu *et al*., 2023). A positive fecal occult blood test indicates that the daily amount of bleeding in the digestive tract of the patient is ≥ 5 ml; black stool indicates that the amount of bleeding is 50-70 ml; haemorrhage indicates a storage volume of 250-300 ml, a decrease in hemoglobin of 1 g and a volume of about 400 ml. According to the electronic medical records of Baoding People's Hospital, the total effective rate is calculated. Total effective rate = excellent rate + effective rate (Zhu *et al*., 2023). *Excellent*: Hemostasis was successful within 24 hours after treatment. There was no evidence of active bleeding (stable blood pressure, heart rate < 90 beats/min, yellow stool, gastroscopy confirmed that bleeding stopped), hemoglobin content was normal and blood urea nitrogen value was no longer increased. *Effective*: Hemostasis was successful within 24-72 hours after treatment and no active bleeding was found. *Invalid*: After 72 hours of treatment, there were still symptoms of bleeding, vomiting, blood or melena, unstable blood

				pressure, heart rate and pulse and hemoglobin content continued to decline or had a downward trend. According to the hospital electronic medical records, the average blood transfusion volume, hospitalization time, rebleeding rate within 3 days, surgical intervention needs and mortality information were collected. Rebleeding was defined as hematemesis, hematochezia, a hemoglobin drop exceeding 2 g/dL, persistent melena, or fresh blood observed in the nasogastric tube after initial treatment. e shown in the previous literature (Stanley *et al*., 2017). VAS was used to assess the degree of pain. The scale ranged from 0 to 10 points. The higher the score, the more severe the pain.
Bias	9	Describe any efforts to address potential sources of bias	The Subjects section in Materials and Methods on page 2.	This study used a clinical retrospective analysis method to include 183 patients with UGIB who were admitted from May 2021 to November 2023. After preliminary screening, patients with specific diseases and an inability to communicate effectively were excluded according to the exclusion criteria. Finally, a total of 170 eligible patients were included in the study and divided into two groups: octreotide monotherapy group (OCT group, n = 83) and combination therapy group (TXA + OCT Group, n = 87). In addition to conventional treatment, patients in the OCT group were only treated with octreotide, while patients in the TXA + OCT group were treated with tranexamic acid combined with octreotide. The information of AUGIB patients was collected according to the electronic medical record information of Baoding People's Hospital.
Study size	10	Explain how the study size was arrived at	The Sample size calculation section in Materials and Methods on page 2.	Reference to other literature, there were at least 40 patients in each group (Omoronyia *et al*., 2025). In this study, the non-response rate was assumed to be 10 % and the shedding rate was 10 % (i.e., r = 20 % or 0.2). Based on the two-sided test design, the significance level $\alpha = 0.05$ and the test efficiency $1-\beta = 0.8$ ($\beta = 0.2$). The calculated sample size was rounded to a minimum of 100 subjects (50 in each group). Finally, 170 subjects were included in this study, which exceeded the preset sample size requirement and provided more sufficient statistical guarantee for the research results.

Continued on next page

Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	The Statistical analysis section in Materials and Methods on page 3.	The data of this study were compared using SPSS 26 software using parametric or non-parametric test methods. The data following a normal distribution were presented as mean ± SD, while categorical variables were expressed as counts n (%). Intergroup comparisons were performed using the chi-square test, with statistical significance set at $P < 0.05$.
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	The Statistical analysis section in Materials and Methods on page 3.	The data of this study were compared using SPSS 26 software using parametric or non-parametric test methods. The data following a normal distribution were presented as mean ± SD, while categorical variables were expressed as counts n (%). Intergroup comparisons were performed using the chi-square test, with statistical significance set at $P < 0.05$.
		(*b*) Describe any methods used to examine subgroups and interactions	-	-
		(*c*) Explain how missing data were addressed	-	-
		(*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed *Case-control study*—If applicable, explain how matching of cases and controls was addressed *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy	The Subjects section in Materials and Methods on page 2.	This study used a clinical retrospective analysis method to include 183 patients with UGIB who were admitted from May 2021 to November 2023. After preliminary screening, patients with specific diseases and an inability to

				communicate effectively were excluded according to the exclusion criteria. Finally, a total of 170 eligible patients were included in the study and divided into two groups: octreotide monotherapy group (OCT group, n = 83) and combination therapy group (TXA + OCT Group, n = 87).
		(*e*) Describe any sensitivity analyses	-	-
Results				
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	The Baseline characteristics section and Fig.1 in Results on page 4.	There were no significant differences in gender, age, BMI, smoking and drinking history, causes of upper gastrointestinal bleeding and Rockall, Blatchford and AIMS65 scores between the two groups ($P > 0.05$), indicating that the two groups of patients were comparable before treatment (Table 1). Fig. 1: Study flow diagram.
		(b) Give reasons for non-participation at each stage	The Fig.1 in Results on page 4.	Excluded (n=13) Not meeting inclusion criteria (n =13) Declined to participate (n=0) Fig. 1: Study flow diagram.
		(c) Consider use of a flow diagram	The Fig.1 in Results on page 4.	Fig. 1: Study flow diagram.
Descriptive	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on	The Baseline	There were no significant

data		exposures and potential confounders	characteristics section in Results on page 4.	differences in gender, age, BMI, smoking and drinking history, causes of upper gastrointestinal bleeding and Rockall, Blatchford and AIMS65 scores between the two groups ($P > 0.05$), indicating that the two groups of patients were comparable before treatment (Table 1).
		(b) Indicate number of participants with missing data for each variable of interest	-	-
		(c) *Cohort study*—Summarise follow-up time (eg, average and total amount)	The Comparison of clinical outcomes section and Table 6 in Results on page 6.	The average hospitalization time of the two groups was 4.04 ± 1.08 days and 3.77 ± 10.5 days respectively. Table 6: Comparison of clinical outcomes (x±s)
Outcome data	15*	*Cohort study*—Report numbers of outcome events or summary measures over time	The Results section on pages 3-6	Onset time, hemostasis time and average bleeding volume Compared with OCT Group, the onset time (95 % CI: − 2.332 to 4.261, t = 6.749, $P < 0.01$) and hemostasis time (95 % CI: 5.057 to 7.143, t = 11.547, $P < 0.01$) of TXA + OCT Group were significantly shortened and the amount of bleeding was also significantly reduced (95 % CI: 38.268 to 56.044, t = 10.474, $P <$ 0.01). It is suggested that the

				combined drug regimen can quickly and effectively control bleeding and show a significant advantage over single drug therapy in clinical hemostatic treatment (Table 2). Blood routine After treatment, the Hb, RBC and platelet PLT of the two groups were significantly increased and the Hb, RBC and PLT of TXA + OCT Group were significantly higher than those of OCT Group ($P < 0.05$). Hb and red blood cell count are higher than those before treatment, which usually indicates the response of bleeding improvement or effective treatment. The increase of platelet count also indicates the enhancement of hemostasis and coagulation function (Table 3). Coagulation function Coagulation function, including PT, TT, APTT and Fib levels, were significantly changed after treatment in both groups ($P < 0.05$). Following treatment, the PT, TT, APTT and Fib levels in TXA + OCT Group were significantly lower than those in OCT Group ($P < 0.001$).

				The decrease of Fib level indicates the decrease of coagulation material consumption, the shortening of PT reflects the recovery of exogenous coagulation pathway function, the shortening of TT indicates the improvement of fibrinogen function or quantity and the shortening of APTT indicates the enhancement of endogenous coagulation pathway function. The clinical manifestations of these multi-index synergistic improvement usually indicate the overall improvement of coagulation function (Table 4). Clinical effective rates After treatment, the TXA + OCT combination therapy demonstrated a significantly higher total effective rate (97.59%) compared to OCT monotherapy (75.90%) ($P < 0.05$). These findings indicate that the combined use of TXA + OCT may provide superior hemostatic efficacy over OCT alone in managing patients at high risk of AUGIB (Table 5). Comparison of clinical outcomes As shown in table 6, OCT Group had 16 patients, with an average loss of 48.19 ± 104.02 ml ; in TXA

				+ OCT Group, 13 patients received blood transfusion, with an average of 33.33 ± 87.16 ml ; the average hospitalization time of the two groups was 4.04 ± 1.08 days and 3.77 ± 10.5 days respectively. About 9.64 % of OCT Group patients and 6.90 % of TXA + OCT Group patients had early rebleeding within the first 3 days after admission. The bleeding of 3 patients in OCT Group and 6.90 % of 1 patient in TXA + OCT Group was uncontrolled and the surgical treatment was finally performed. One death occurred in OCT Group (1.20 %). There was no death in TXA + OCT Group. VAS score After treatment, the pain symptoms of the two groups were significantly improved compared with those before treatment. The VAS of TXA + OCT Group decreased to 1.48 ± 0.92, which was significantly lower than 0.93 ± 0.91 of the single OCT treatment group ($t = 3.929$, $P < 0.001$). This suggests that the combined treatment regimen shows a more significant therapeutic advantage in relieving pain in patients (Table 7).

				Adverse effects There was no significant difference in adverse reactions such as stomach pain, abdominal distension, headache, chest tightness, palpitation, elevated blood pressure and allergic reactions between TXA + OCT Group and OCT Group ($P > 0.05$). This important finding suggests that increasing the combination of drugs on the basis of existing treatment regimens does not significantly increase the risk of adverse drug reactions in patients and confirms the clinical feasibility of the combined treatment strategy from a safety perspective (Table 8).
		Case-control study—Report numbers in each exposure category, or summary measures of exposure	-	-
		Cross-sectional study—Report numbers of outcome events or summary measures	-	-
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	The Results section on pages 3-6	Onset time, hemostasis time and average bleeding volume Compared with OCT Group, the onset time (95 % CI: − 2.332 to 4.261, t = 6.749, $P < 0.01$) and hemostasis time (95 % CI: 5.057 to 7.143, t = 11.547, $P < 0.01$) of TXA + OCT Group were significantly shortened and the amount of bleeding was also significantly reduced (95 % CI:

				38.268 to 56.044, t = 10.474, $P < 0.01$). It is suggested that the combined drug regimen can quickly and effectively control bleeding and show a significant advantage over single drug therapy in clinical hemostatic treatment (Table 2). Blood routine After treatment, the Hb, RBC and platelet PLT of the two groups were significantly increased and the Hb, RBC and PLT of TXA + OCT Group were significantly higher than those of OCT Group ($P < 0.05$). Hb and red blood cell count are higher than those before treatment, which usually indicates the response of bleeding improvement or effective treatment. The increase of platelet count also indicates the enhancement of hemostasis and coagulation function (Table 3). Coagulation function Coagulation function, including PT, TT, APTT and Fib levels, were significantly changed after treatment in both groups ($P < 0.05$). Following treatment, the PT, TT, APTT and Fib levels in TXA + OCT Group were significantly

				lower than those in OCT Group ($P < 0.001$). The decrease of Fib level indicates the decrease of coagulation material consumption, the shortening of PT reflects the recovery of exogenous coagulation pathway function, the shortening of TT indicates the improvement of fibrinogen function or quantity and the shortening of APTT indicates the enhancement of endogenous coagulation pathway function. The clinical manifestations of these multi-index synergistic improvement usually indicate the overall improvement of coagulation function (Table 4). Clinical effective rates After treatment, the TXA + OCT combination therapy demonstrated a significantly higher total effective rate (97.59%) compared to OCT monotherapy (75.90%) ($P < 0.05$). These findings indicate that the combined use of TXA + OCT may provide superior hemostatic efficacy over OCT alone in managing patients at high risk of AUGIB (Table 5). Comparison of clinical outcomes As shown in table 6, OCT Group

				had 16 patients, with an average loss of 48.19 ± 104.02 ml ; in TXA + OCT Group, 13 patients received blood transfusion, with an average of 33.33 ± 87.16 ml ; the average hospitalization time of the two groups was 4.04 ± 1.08 days and 3.77 ± 10.5 days respectively. About 9.64 % of OCT Group patients and 6.90 % of TXA + OCT Group patients had early rebleeding within the first 3 days after admission. The bleeding of 3 patients in OCT Group and 6.90 % of 1 patient in TXA + OCT Group was uncontrolled and the surgical treatment was finally performed. One death occurred in OCT Group (1.20 %). There was no death in TXA + OCT Group. VAS score After treatment, the pain symptoms of the two groups were significantly improved compared with those before treatment. The VAS of TXA + OCT Group decreased to 1.48 ± 0.92, which was significantly lower than 0.93 ± 0.91 of the single OCT treatment group ($t = 3.929$, $P < 0.001$). This suggests that the combined treatment regimen shows a more

				significant therapeutic advantage in relieving pain in patients (Table 7). Adverse effects There was no significant difference in adverse reactions such as stomach pain, abdominal distension, headache, chest tightness, palpitation, elevated blood pressure and allergic reactions between TXA + OCT Group and OCT Group ($P > 0.05$). This important finding suggests that increasing the combination of drugs on the basis of existing treatment regimens does not significantly increase the risk of adverse drug reactions in patients and confirms the clinical feasibility of the combined treatment strategy from a safety perspective (Table 8).
		(*b*) Report category boundaries when continuous variables were categorized	-	-
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	-	-

Continued on next page

Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	-	-
Discussion				
Key results	18	Summarise key results with reference to study objectives	The Discussion section on pages 6-8	In this study,the onset time of the combination was faster than that of octreotide and the hemostasis time was shorter. In this study, the effect of TXA combined with OCT treatment group was more significant than that of OCT monotherapy group in shortening PT, TT and APTT, suggesting that the combination of drugs can promote faster recovery of coagulation function. Although the results of this study showed that there was no significant difference between the two groups in terms of average blood transfusion volume, hospital stay, 3-day rebleeding rate, surgical intervention needs and total mortality. However, the combined treatment group still showed a trend toward improvement in clinical efficacy indicators. In this study, the total effective rate of the combined treatment group was significantly improved and the total effective rate was higher than that of previous studies, which may be due to the synergistic effect of the combined treatment plan. In

				addition, there was no significant increase in adverse reactions with the combination, suggesting that the combination therapy is well tolerated while improving efficacy. In this study, the degree of pain relief in the combined treatment group was better than that in the single drug treatment group.
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	The Discussion section on pages 8	This study confirmed that tranexamic acid combined with octreotide has significant clinical efficacy in the treatment of high-risk patients with AUGIB. However, it must be objectively recognized that there are still several important limitations in the current study that need to be clarified. First of all, multiple key clinical parameters of the combination regimen are not yet clear, including the best time for preventive use, the selection criteria for specific populations, the precise grasp of drug dosage and the optimal selection of administration timing. These need to be further verified by a rigorously designed large-sample prospective study. Secondly, the safety issues that may be brought about by the combination of drugs, such as drug

				interactions, adverse reaction superposition effects, etc., also require more systematic quantitative evaluation. To generate more robust medical evidence, multi-center, randomized controlled clinical trials are urgently required, and high-quality meta-analyses should be conducted on this basis . Only through rigorous methodological verification, good repeatability and peer-reviewed research results, valuable references for clinical practice can be truly provided, thereby facilitating the accumulation of medical knowledge and the advancement of diagnostic and therapeutic levels.
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	The Meaning and Innovation section in Discussion section on pages 8.	This study provides a new clinical basis for the efficacy and safety of tranexamic acid combined with octreotide in patients with high risk of acute upper gastrointestinal bleeding. The results showed that the combined treatment of tranexamic acid and octreotide not only acted quickly but also effectively controlled bleeding and improved hemostasis. It also significantly improved the effective rate of treatment and effectively alleviated the pain symptoms of

				patients, which opened up a new treatment path for the clinical management of patients with high risk of AUGIB.
Generalisability	21	Discuss the generalisability (external validity) of the study results	The Discussion and Conclusion sections on page 8.	Although the application of this combination therapy in patients with high risk of acute upper gastrointestinal bleeding is still in the exploratory stage, this study provides an important reference for clinical decision-making of patients with high risk of AUGIB and also lays a theoretical foundation for expanding the application of this combination therapy in other hemorrhagic diseases. To generate more robust medical evidence, multi-center, randomized controlled clinical trials are urgently required, and high-quality meta-analyses should be conducted on this basis . Only through rigorous methodological verification, good repeatability and peer-reviewed research results, valuable references for clinical practice can be truly provided, thereby facilitating the accumulation of medical knowledge and the advancement of diagnostic and therapeutic levels. Despite the limitations of this study in many aspects, this finding

				provides new medical evidence for the clinical treatment of patients with high risk of AUGIB. The follow-up study should explore the mechanism of combined treatment through rigorous methodological verification and systematically evaluate its long-term efficacy and safety, in order to further improve the diagnosis and treatment of AUGIB and improve the treatment effect and quality of life of patients.
Other information				
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	The Funding section on page 8	This study was supported by Baoding Science and Technology Plan Project. (Grant No. 2341ZF132)

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.