The ESC Chatbot



A new tool for the implementation of the ESC Guidelines

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What is ESC Chat?



 ESC Chat is an AI-powered chatbot tool based on a Large Language Model (LLM).

 It has been trained exclusively on selected ESC Clinical Practice Guidelines (CPGs).

• Its goal is to offer quick, **conversational access** to ESC Guidelines, supporting the usability and implementation of evidence-based practices.

What kind of questions can ESC Chat answer?



• ESC Chat only answers questions and provides answers related to the content of current ESC CPGs.

 This applies to follow-up questions, questions on additional references and questions combining different guidelines.

 Aim: better understand guideline recommendations, definitions, diagnostic criteria, risk assessments, and treatment pathways covered in these guidelines.

Is ESC Chat available in multiple languages?



• ESC Chat understands questions in multiple languages, but answers in English only.

What makes ESC Chat different from other AI tools? © ESC

• ESC Chat is the only ESC endorsed AI tool designed to support best clinical practices by providing **reliable** answers based exclusively on ESC CPGs.

 Unlike other chatbots, it offers guideline-specific responses with direct links to relevant sections of the full-text guidelines (time-saving resource, good asset for implementation of evidence-based recommendations).

What if I disagree with the answer?



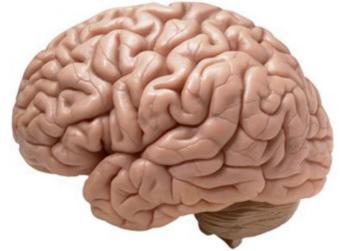
 If disagree, our feedback can be provided using the "Add comment" feature within ESC Chat's interface.

• These inputs help us improve the tool and ensure that it provides the most accurate and helpful information.





 No, ESC Chat is an information system to help improve access to ESC CPGs and must not be used as a substitute for a brain.







ESC CHAT

Your Guidelines Companion

www.escardio.org/escchat

Beta testing





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ESC Chat provides instant and personalised answers to clinical queries, based **exclusively on current ESC Clinical Practice Guidelines.**

Ask your guideline-related question, and ESC Chat will promptly generate the answer, providing the relevant citations and reference links from the respective full texts. You can also refine your question and ask follow-up questions.

Please log in to access ESC Chat.

Sign-in

Question 1



I would like to know whether my patient, who has just had a myocardial infarction, needs beta-blockers at discharge

The use of beta-blockers after a myocardial infarction (MI) depends on several factors, including the patient's left ventricular ejection fraction (LVEF) and the presence of heart failure symptoms.

- 1. Patients with Reduced LVEF: Beta-blockers are recommended for patients with LVEF ≤40% after an acute coronary syndrome (ACS), regardless of heart failure symptoms. This recommendation is supported by strong evidence from clinical trials 1, 3.
- 2. Patients with Preserved LVEF: The evidence for prescribing beta-blockers after uncomplicated ACS in patients with LVEF >40% is less well established. While some observational studies suggest potential benefits, the results are mixed, and there are no large randomized controlled trials (RCTs) confirming their efficacy in this group ^{1, 2}. Ongoing trials are currently investigating this issue further.
- 3. **Duration of Therapy:** The duration of beta-blocker therapy is also debated. Some studies indicate that the clinical benefit may be limited to the first year post-MI, while others suggest that discontinuation after one year does not significantly increase mortality risk ². Ongoing trials are examining the impact of beta-blocker withdrawal after 6-12 months in patients with preserved LVEF ^{1, 2}.

In summary, if your patient has reduced LVEF (≤40%), beta-blockers are indicated at discharge. If the LVEF is >40% and there are no heart failure symptoms, the decision to prescribe beta-blockers should be made based on the latest evidence and ongoing clinical trials.

3 references 💙

- 1 2023 ESC Guidelines on acute coronary syndromes 13.3.3. Beta-blockers
- 2 2024 ESC Guidelines for the diagnosis and management of CCS 4.2.2. Beta blockers
- 2023 ESC Guidelines on acute coronary syndromes 13.3.10. Hormone replacement therapy





Proceeding to



Type a new question...





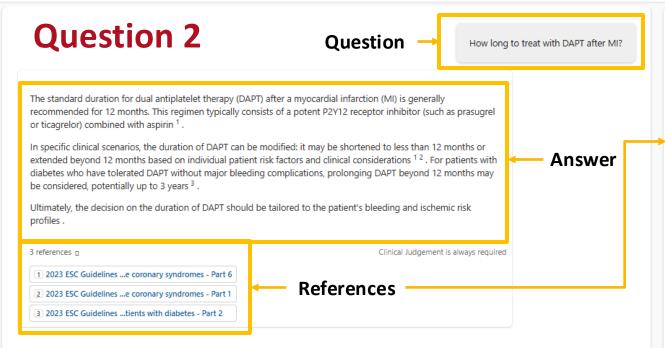
Semantic Search

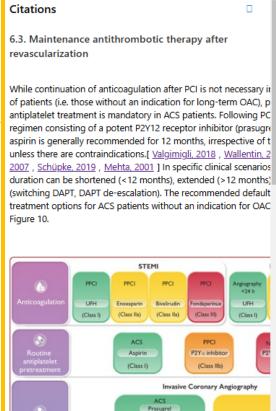
=Q Vector Search

Search

New question or refine

current question





Question 3

I have a patient with suspected chronic coronary syndrome. When should I request a CT scan and when a functional imaging test?

In the context of suspected chronic coronary syndrome (CCS), the choice between requesting a CT scan (specifically coronary computed tomography angiography, CCTA) and a functional imaging test depends on the pre-test likelihood of obstructive coronary artery disease (CAD) and the specific clinical scenario:

1. CT Scan (CCTA):

- CCTA is recommended as a first-line test for individuals with a low to moderate pre-test likelihood of obstructive CAD (greater than 5% but less than 50%) when functional imaging for myocardial ischemia is not diagnostic ^{1, 4}.
- It is particularly effective in ruling out obstructive CAD due to its high negative predictive value. CCTA can also visualize non-obstructive CAD, which may prompt preventive measures

2. Functional Imaging Tests:

- Functional imaging should be selected as a first-line test if there is a moderate to high likelihood of obstructive CAD (greater than 15% to 85%) and if information on myocardial ischemia, viability, or microvascular disease is desired ^{2, 3}.
- These tests are preferred when the clinical scenario indicates a need for assessing ischemia, especially in patients with symptoms unresponsive to medical therapy or those with a high event risk ².

In summary, request a CCTA for patients with low to moderate likelihood of obstructive CAD, and opt for functional imaging tests when the likelihood is moderate to high or when specific information about myocardial ischemia is needed. Always consider the individual patient's clinical context and preferences when making your decision ^{1, 2, 3}.

4 references 💙

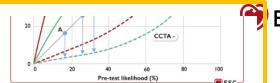


Figure 8 Ruling in and ruling out functionally significant obstructive coronary artery disease by sequential anatomical (coronary computed tomography angiography) and functional (dobutamine stress echocardiography) testing. CAD, coronary artery disease; CCTA, coronary computed tomography angiography; DSE; dobutamine stress echocardiography; ECG, electrocardiogram; FFR, fractional flow reserve. The curves display the post-test likelihood of obstructive CAD for a positive (+) and a negative (-) test result for CCTA and DSE, as the pre-test likelihood of obstructive CAD increases. The post-test likelihoods were calculated using the likelihood ratios taken from recent metaanalyses.148,388aBased on invasive FFR measurement or diameter stenosis of ≥70%. A 70-year-old woman with four coronary risk factors and exertional dyspnoea has a pre-test likelihood of 16% (A), A normal CCTA almost completely rules out obstructive CAD with a very low negative post-test likelihood (2%). A 55year-old man with two coronary risk factors and all three anginal symptom characteristics has a pre-test likelihood of 27% (B). An abnormal CCTA brings the post-test likelihood to 40%, insufficient to rule in obstructive CAD. Sequential testing with DSE performed after CCTA brings the post-test likelihood to 82%. A normal CCTA effectively rules out obstructive CAD. A 69-year-old man with four coronary risk factors and all three anginal symptom characteristics has an adjusted pre-test

^{1 2024} ESC Guidelines for the diagnosis and management of CCS - 3.3.4. Diagnostic algorithm and selection of a...

^{2 2024} ESC Guidelines for the diagnosis and management of CCS - 3.3.4. Diagnostic algorithm and selection of a...





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Campaign Phases & Activation



Phase		Timing
1.	Kol beta launch	1 June onwards
2.	Social media teaser Campaign	1 August onwards
3.	Public launch @ ESC Congress 2025	29 Aug to 1st Sept
4.	Recruitment drive	Post congress
5.	Retention	Post Congress - Rolling

Focus

Selected KOL beta test community

30K

• Spotlight feature in ESC Leadership newsletter

1500 serving ESC Officers

Social media - organic

+900K Followers

 Reveal (app + features) at Inaugural session, GLs press conference, omnichannel promotion: e-dailies, Congress News article, signage QR codes, intersession slide show

Exposure 30K +

Personalised email marketing to HCPs, HODs, Researchers:

ESC database (300K+)

- On-going social & YouTube media outreach (paid/unpaid).
- Multi-channel ongoing campaign.

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ESC Chat Dedicated App



- FREE download in stores
- Easily recognisable app thumbnail



Public Launch @ESC Congress 2025



Launch on stage at Inaugural





Guidelines Press conference "highlight"



APP QR codes in multiple places at congress



In a nutshell





Purpose: The ESC Chat aims to provide quick, conversational access to ESC's CPGs, enhancing usability and implementation of evidence-based practices in healthcare



Features: It uses natural language processed LLMs, provides clear source referencing, and allows for contextual follow-up questions



Accessibility: Available to all cardiovascular disease professionals with a My ESC login, promoting widespread adoption of guidelines now on the web, at Congress via App too

Thanks for listening



Do not miss the opportunity to download and use the ESC Chat in the upcoming weeks!