

# The EUFOREA pocket guide for chronic rhinosinusitis\*

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## Dear Editor:

Chronic rhinosinusitis (CRS) is known to affect around 5 % of the total population, with major impact on the quality of life of those severely affected <sup>(1)</sup>. Despite a substantial burden on individuals, society and health economies, CRS often remains under-diagnosed, under-estimated and under-treated <sup>(2)</sup>. International guidelines like the European Position Paper on Rhinosinusitis and Nasal Polyps (EPOS) <sup>(3)</sup> and the International Consensus statement on Allergy and Rhinology: Rhinosinusitis 2021 (ICAR) <sup>(4)</sup> offer physicians insight into the recommended treatment options for CRS, with an overview of effective strategies and guidance of diagnosis and care throughout the disease journey of CRS. However, barriers to access to appropriate diagnosis and effective treatment remain at patient, pharmacist and physician levels, including inability to recognize CRS and diagnose it, inappropriate CRS medication prescription/use, poor concordance with CRS treatment recommendations and/or lack of awareness of newly available options for CRS care <sup>(5)</sup>. Of note, endoscopic sinus surgery and oral corticosteroids (OCS) do not always result in full disease control, with the need of referral to tertiary care <sup>(6)</sup>. For the evaluation of the severity of disease and follow-up of treatment outcomes, the visual analogue scale (VAS) has been introduced as a simple tool, mainly in the context of e-health for disease monitoring and clinical trials. However, guidelines based solely on VAS may not reflect the needs of physicians and patients in real-life, since VAS scores are not routinely used in everyday practice and may not capture the clinical phenotypes. In addition to VAS scores, Sino-Nasal Outcome test (SNOT)-22 scores may be more informative given the evaluation of different sinonasal and overall symptoms reflecting the burden of disease, and the well-known scores in the general population as

well as in those with severe CRSwNP having been included in all surgery and biological trials in recent years <sup>(7, 8)</sup>.

Building further on the success of the pocket guides for adult and paediatric allergic rhinitis <sup>(9, 10)</sup>, the European Forum for Research & Education in Allergy & Airway Diseases (EUFOREA) in collaboration with global key opinion leaders in the field of chronic inflammatory airways disease, has developed a CRS pocket guide with a new treatment algorithm with the following aims: to expedite access to CRS diagnosis and treatment, to simplify clinical care pathways of CRS, and to facilitate coordinated care amongst the stakeholders involved in CRS care. The algorithm is based on the EPOS2020 and ICAR-Rhinosinusitis 2021 documents, and designed for real-life use. Given the clear messages on key diagnostic actions and simplicity of the CRS algorithm, the EUFOREA pocket guide aims at improving CRS knowledge amongst all stakeholders involved in CRS care and streamlining the transition of patients between self-, pharmacy-, GP- and specialist-care, facilitating more coordinated care. The EUFOREA pocket guide also includes a diagnostic checklist when assessing CRS patients including a list of symptoms suggestive and less suggestive of CRS, questions on suspected comorbid asthma, and instructions on how to use the VAS for CRS. The diagnosis of smell dysfunction and nasal congestion or obstruction require specific diagnostic actions beyond history by health care providers (Figure 1). In addition a list of suggested indications is provided for referral of specific CRS patients to specific colleagues, reflecting the heterogeneity of health care providers involved in CRS care. It makes sense to adopt multi-disciplinary assessments and management for specific patients suffering from comorbid

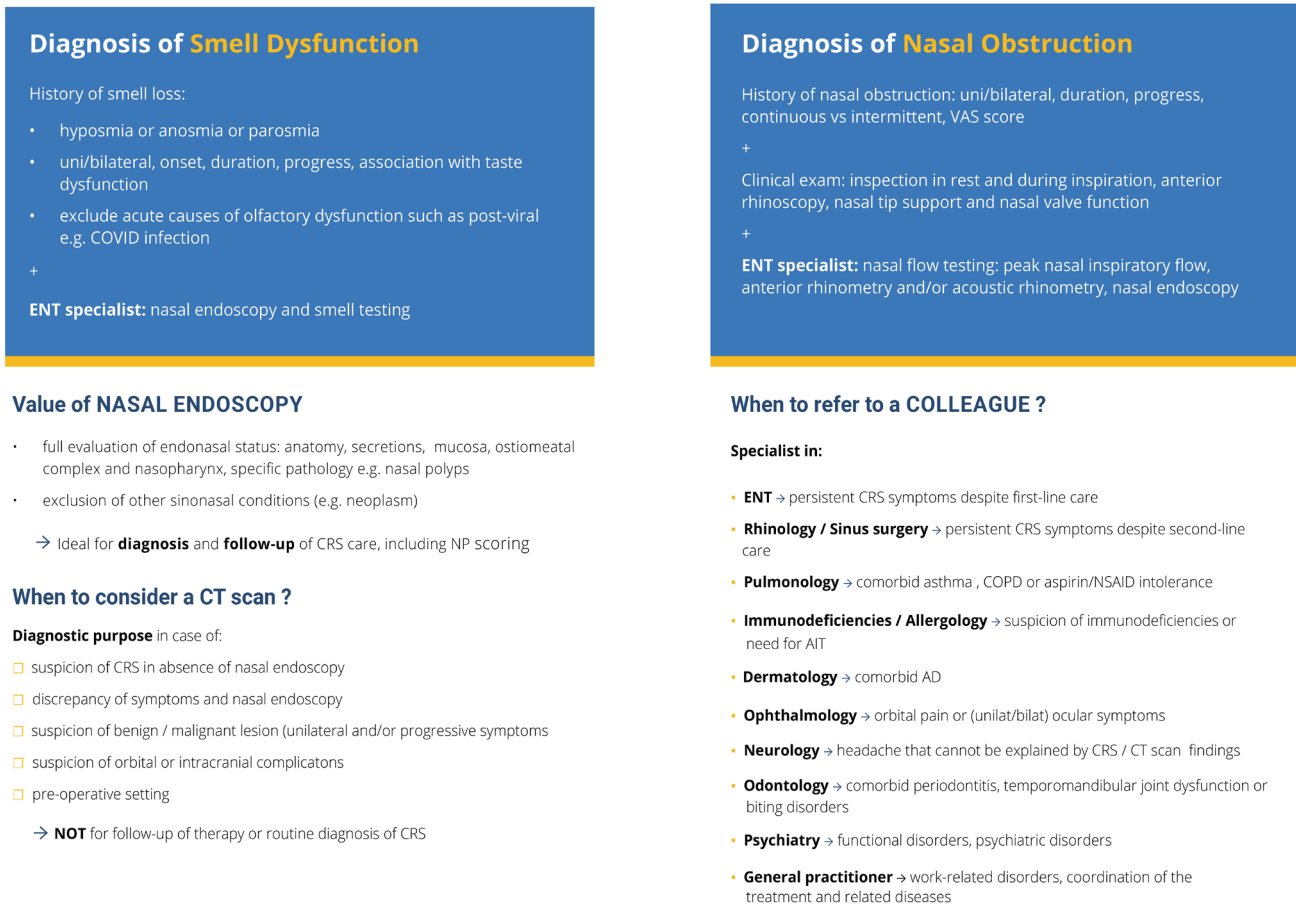


Figure 1. Most relevant diagnostic actions and consideration in relation to CRS care.

rbidities, and/or neurological, ophthalmologic, dentogenic, psychologic and/or occupational factors contributing to the CRS phenotype.

The CRS pocket guide is presented as 5 easy steps: (i) diagnosis, (ii) classification of patients, (iii) definition of therapy, (iv) selection of product, and (v) activation of treatment plan, and with pro-active follow-up of patients. As an overall consideration (Figure 2), patients should be educated on the disease, treatment adherence and avoidance of external triggers, with nasal rinsing and nasal corticosteroids being the mainstay of care. In case of failure of the basics, referred to as step 1 in the algorithm, a firm diagnosis is recommended at specialist level with the consideration of OCS or Endoscopic Sinus Surgery (ESS). In case of failure of step 2 treatment and/or uncontrolled severe CRS, endotyping is recommended at specialist level, including different options for the Type 1 and Type 2 endotypes of CRS. Interestingly, the key pillars of care for severe uncontrolled CRS, i.e., OCS, ESS and biologics all have pros and cons that need to be considered at the time of implementation. At any time in the disease journey, there are red flags that warrant immediate referral and emer-

gency care, as listed in the treatment algorithm (Figure 2).

The CRS pocket guide is available on the EUFOREA ([www.euforea.eu](http://www.euforea.eu)) and Rhinology (<https://www.rhinologyjournal.com>) website, and easy-to-use in everyday clinical practice for any care provider as it is concise, patient-centered, and captures every single patient who attends the outpatient clinic of any care provider. Upon the suggestion of the Patient Advisory Board of EUFOREA, a patient version will appear in 2023 on the EUFOREA website.

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### Authorship contribution

All authors contributed to the development and finetuning of the treatment algorithm and the pocket guide.

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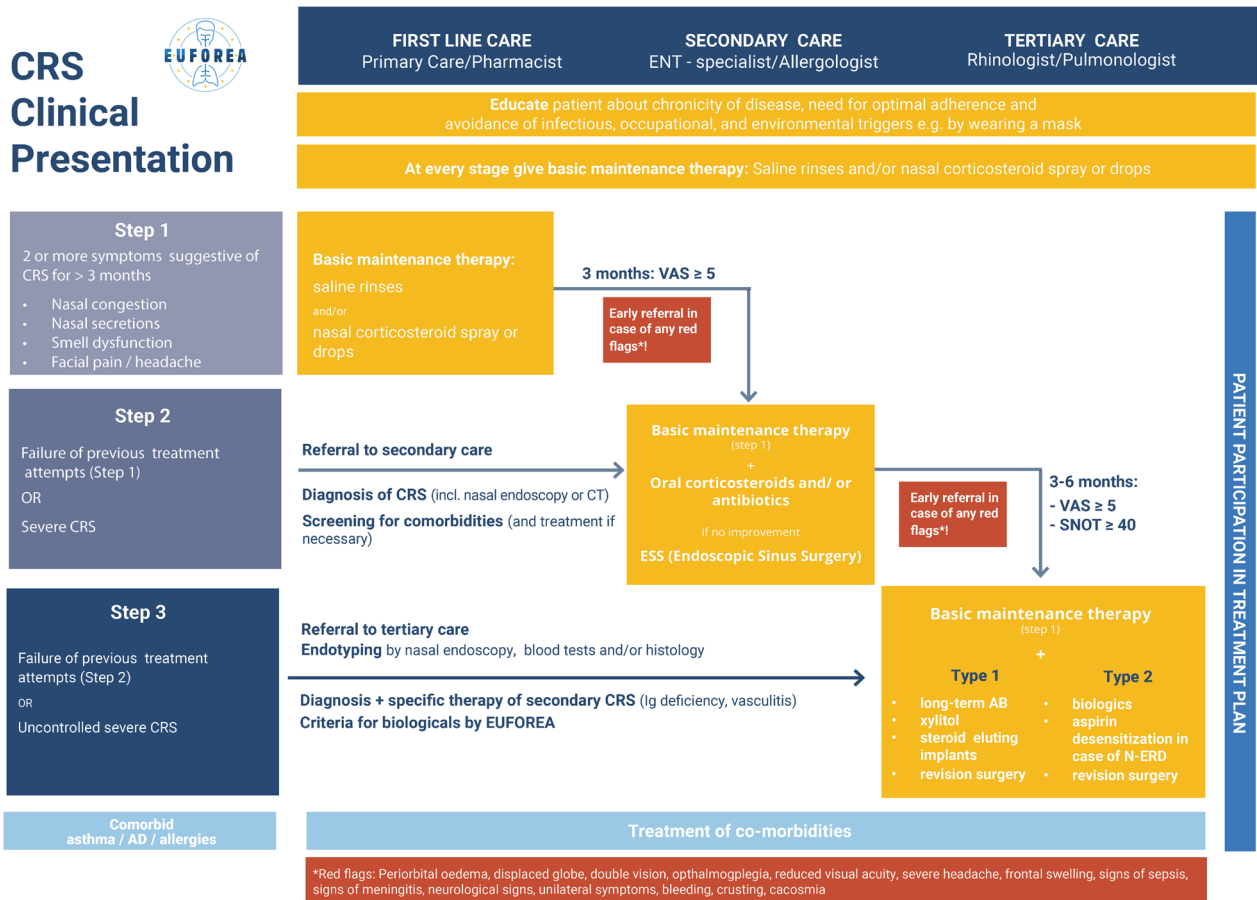


Figure 2. EUFOREA CRS pocket guide treatment algorithm. AB: Antibiotics; EUFOREA: European Forum for Research & Education in Allergy & Airway Diseases; VAS: visual analogue scale.

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