Is *baseline SNOT-22* able to predict **diagnosis** *and* **localize** pathology?

A multicentre study

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I. Introduction

Sino-Nasal Outcome Test-22 Questionnaire v4

Below you will find a list of symptoms and social/emotional consequences of your nasal disorder. We would like to know more about these problems and would appreciate you answering the following question to the best of your ability. There are no right or wrong answers, and only you can provide us with this information. Please rate your problems, as they have been over the past two weeks. Thank you for your participation.

Considering how severe the problem is when you experience it and how frequently it happens, please rate each item below on how 'bad' it is by circling the number that corresponds with how you feel using this scale →	No problem	Very mild problem	Mild or slight problem	Moderate problem	Severe problem	Problem as bad as it can be
1. Need to blow nose	0	1	2	3	4	5
2. Sneezing	0	1	2	3	4	5
3. Runny nose	0	1	2	3	4	5
4. Cough	0	1	2	3	4	5
5. Post nasal discharge (dripping at the back of your nose)	0	1	2	3	4	5
6. Thick nasal discharge	0	1	2	3	4	5
7. Ear fullness	0	1	2	3	4	5
8. Dizziness	0	1	2	3	4	5
9. Ear pain/pressure	0	1	2	3	4	5
10. Facial pain/pressure	0	1	2	3	4	5
11. Difficulty falling asleep	0	1	2	3	4	5
12. Waking up at night	0	1	2	3	4	5
13. Lack of a good night's sleep	0	1	2	3	4	5
14. Waking up tired	0	1	2	3	4	5
15. Fatigue during the day	0	1	2	3	4	5
16. Reduced productivity	0	1	2	3	4	5
17. Reduced concentration	0	1	2	3	4	5
18. Frustrated/restless/irritable	0	1	2	3	4	5
19. Sad	0	1	2	3	4	5
20. Embarrassed	0	1	2	3	4	5
21. Sense of taste/smell	0	1	2	3	4	5
22. Blockage/congestion of nose	0	1	2	3	4	5

TOTAL: _____   _____   _____   _____   _____

GRAND TOTAL: _____

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Patient No.:   d.o.b.:   Date:

M F
Diagnosis: Aims of Treatment:

Today's treatment: L-M score:

Sino-Nasal Outcome Test (SNOT-22):

- Disease-specific questionnaire
- 22 symptoms rated from 0 (no problem) to 5 (problem as bad as it can be).
- Score ranges from 0 to 110, with a higher score indicating poorer condition
- Rhinologic + General health issues
- Designed and validated for rhinosinusitis but also in various nose conditions
- Translated and validated into French, Dutch, German and many other languages

AIM

SNOT-22 is already used to score severity

Could SNOT-22 predict the diagnosis, localize pathology, predict the need for surgical treatment ?

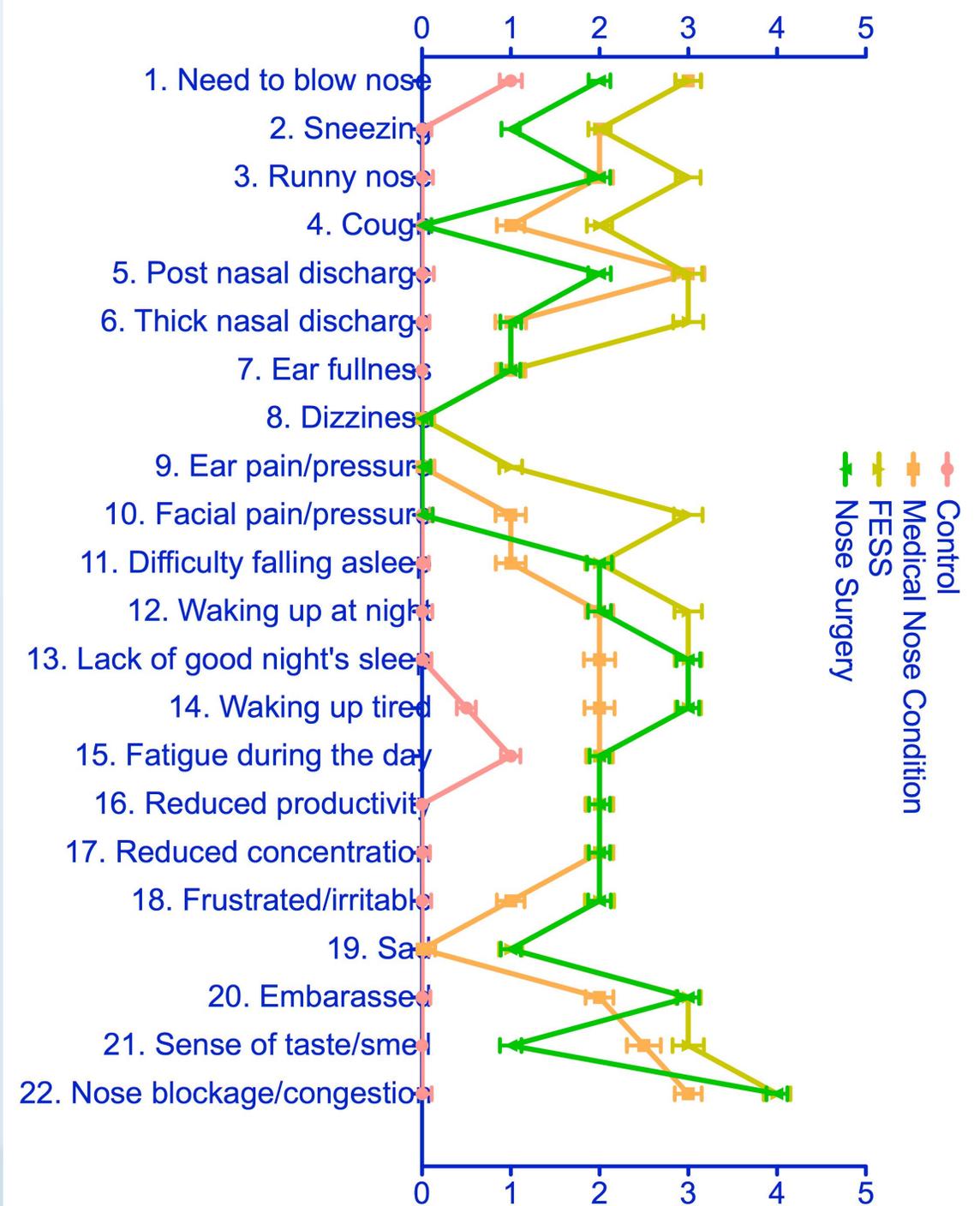Is Baseline SNOT-22, collected prior seeing the ENT surgeon, linked to a diagnosis ?

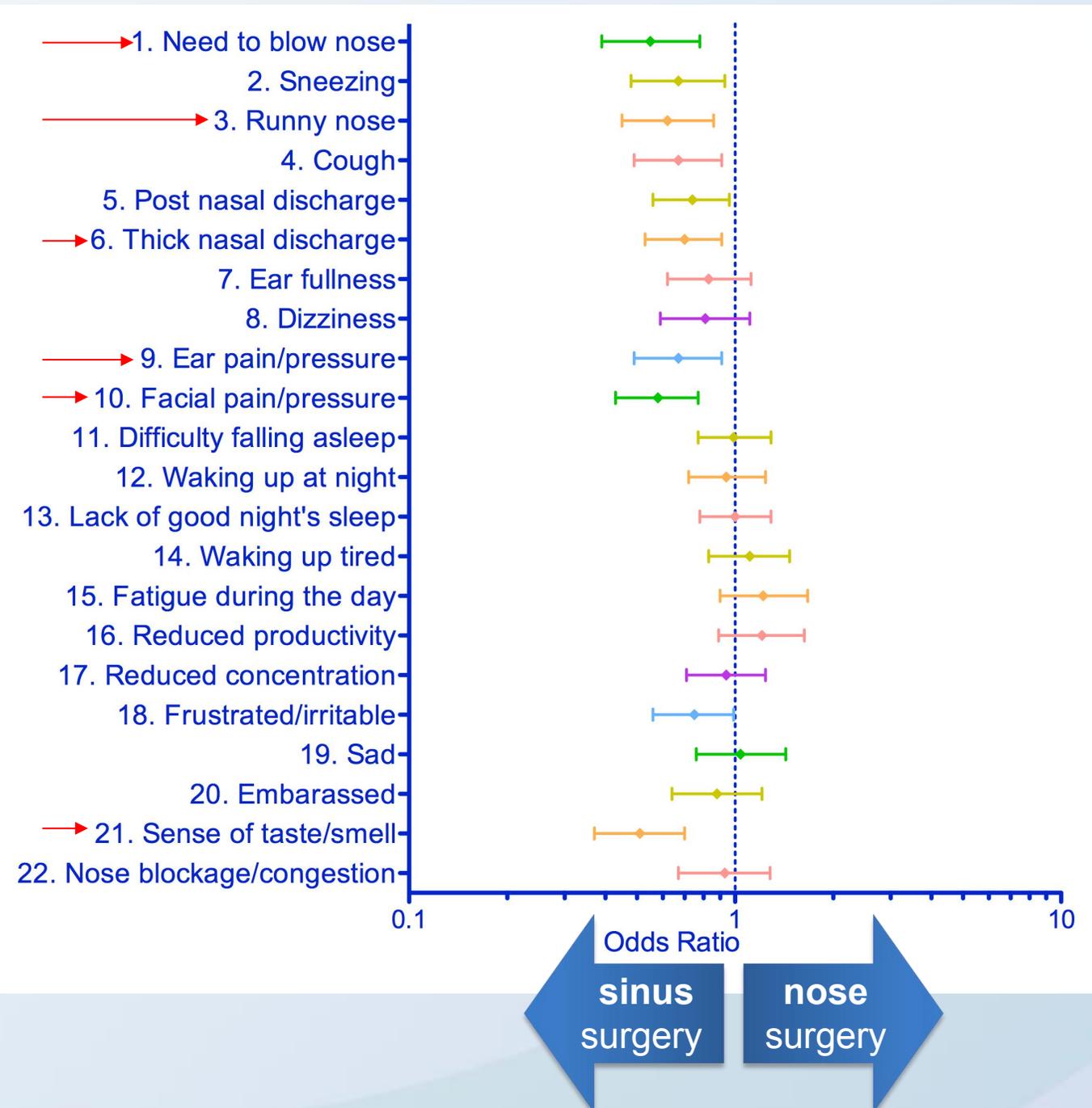Could the pattern of SNOT-22 answers indentify the need for surgery and which one ?
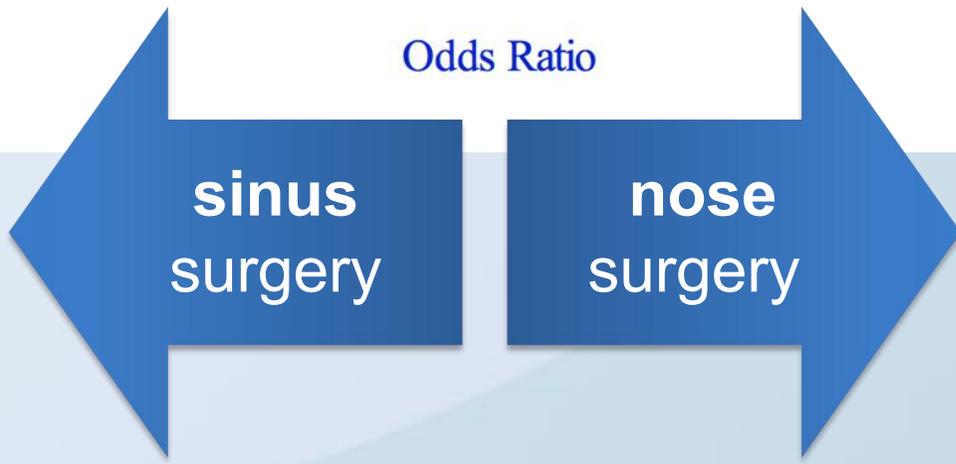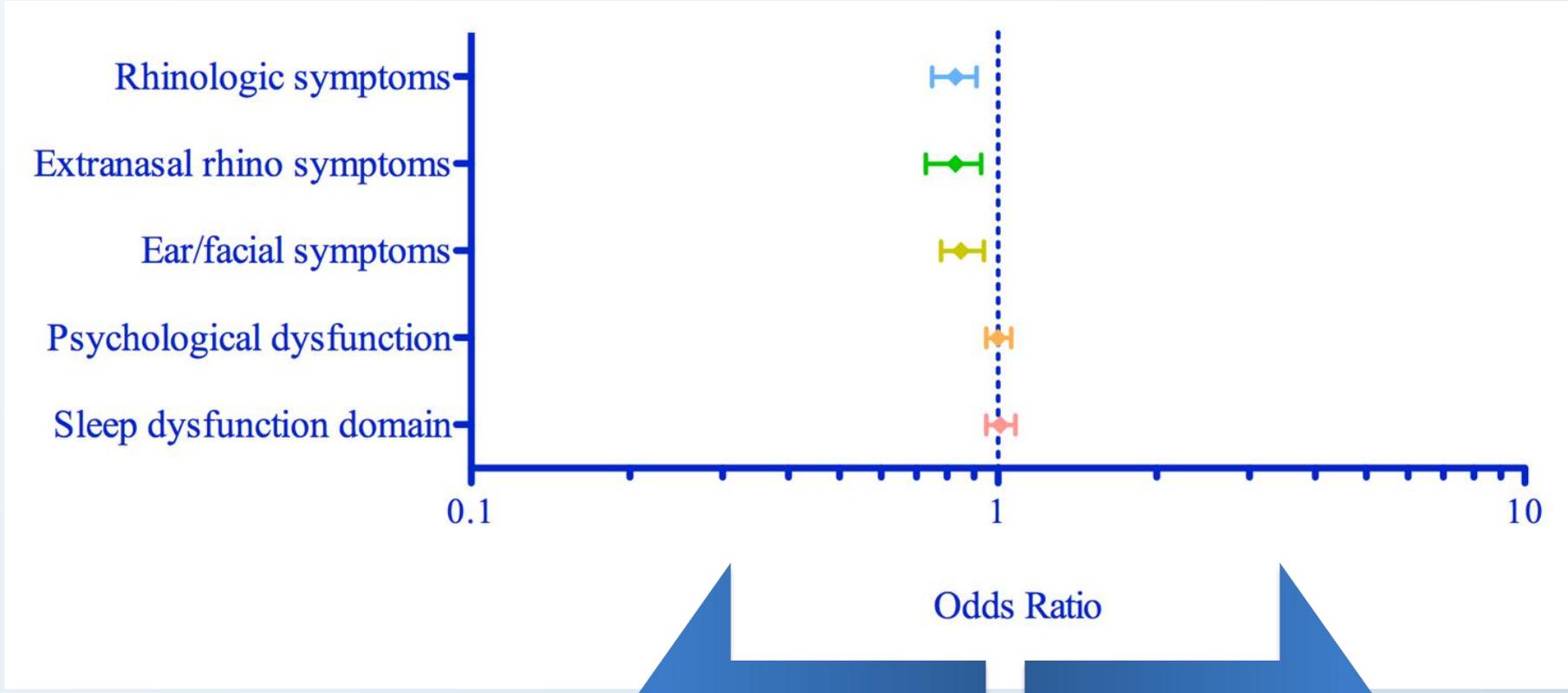
II. Material and Methods

- 66 healthy volunteers and 383 patients

- Rhinology clinics of 3 ENT academic departments (ULiège, UCL, ULB)

- General data and baseline SNOT-22 collected blindly *before* consultation

- 4 groups defined a posteriori according to the diagnosis:
  - medical rhinologic condition (n=101)
  - nose surgery (n=164)
  - sinus surgery (n=118)
  - control (n=66)

- Multinomial logistic regression adjusted for age, gender, history of nose surgery and trauma.

III. Results

- The 22 items differed significantly among the 4 groups (p<0.005)

- Control subjects: lowest SNOT-22 scores for all items

- Sinus surgery and nose surgery groups: specific pattern of SNOT-22 score

IV. <u>Discussion and conclusions</u>

- Distinct SNOT-22 patterns associated to subjects diagnosis

- SNOT-22 :
    able to differentiate patients from controls
    to score severity
    could further provide an accurate description of pathology
    could help localize pathology in the sinus or in the nose and
    predict the need for surgical treatment

- Quality of life, specific diagnosis and surgical outcome

- SNOT-22 = simple and effective tool

- Easy to implement in primary care

Thanks for your Attention