

# OPTIMIZING SKIN CANCER DETECTION IN THE GENERAL POPULATION: AN EARLY ACCESS LESION-DIRECTED CONSULTATION

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## INTRODUCTION

**Systematic screening** of the general population for skin cancer has **not** been proven to be **cost-effective**. In previous studies, we observed comparable detection rates in a population-based total body examination (TBE) and a lesion-directed screening (LDS) (2.3% versus 3.2%), the latter specifically **addressing a lesion of concern** meeting one of the criteria listed under 'Materials and Methods'(1).

We examined this **lesion-directed screening approach** in depth by introducing an early access consultation at our dermatology department.

## MATERIALS AND METHODS

Patients contacting the dermatology unit with 1 to 3 lesion(s) of concern were offered an early access consultation, preferably within one week. After clinical and dermoscopic evaluation of the lesion(s) of concern, a total body examination was offered. From February 2017 to April 2017 and October 2017 to July 2019, 342 patients consulted, of which 297 (86.8%) gave consent to analyse their data.

### Inclusion criteria

1-3 lesions that met one of the following criteria:

New lesion in adult (18+)	Lesion in worried patient already in follow-up for skin cancer
Ugly duckling	Fast growing mole
Referral by non-dermatologist concerning suspicious lesion	Changed mole

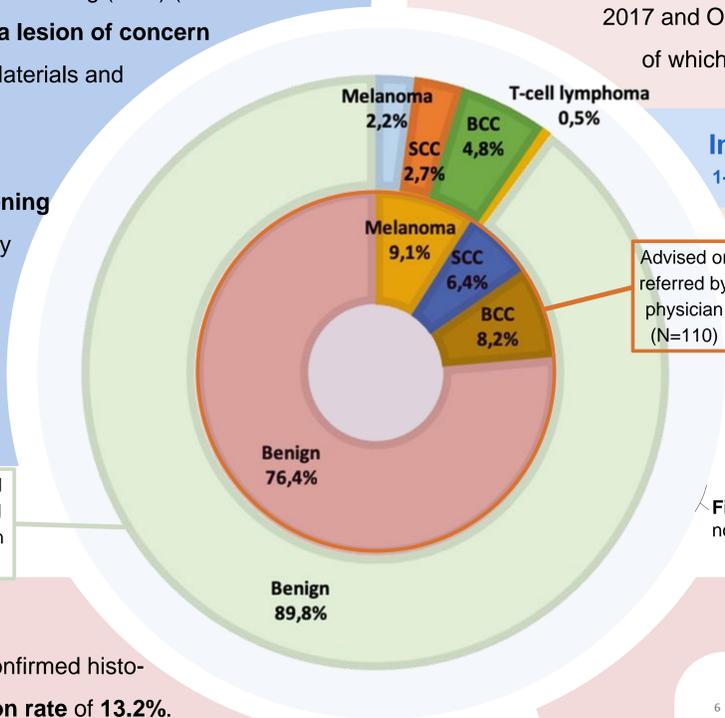


Fig. 1: detection rates illustrated by (non-)referral or advice by non-dermatologist to consult a dermatologist

## RESULTS

A total of **45 skin cancers** have been confirmed histologically resulting in a minimum **detection rate** of **13.2%**.

Among these 14 were melanoma, 18 BCC and 12 SCC and 1 T-cell lymphoma correlating with minimum detection rates of 4.1%, 5.3%, 3.5% and 0.3% respectively. After a TBE in patients without a malignant index lesion 3 additional BCCs were detected matching a detection rate of 1.2% (3/251). A **significant higher skin cancer detection rate** was observed in **patients advised** by the general practitioner to visit a dermatologist (26/110 (23.6%) versus 19/186 (10.2%), P<0.001). Analysis of anxiety before and after the consultation, showed a significant decrease in VAS in patients without a suspicious lesion (P<0.001).

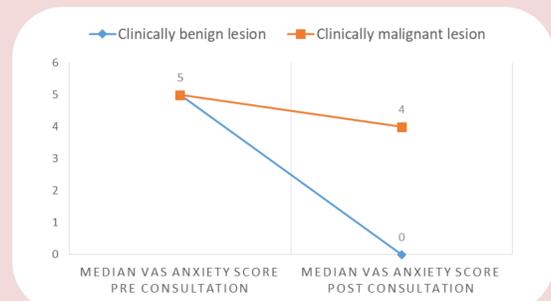


Fig. 2: VAS anxiety scores illustrated according to clinical diagnosis

Lesion	TBE screening (N=1668) <sup>1</sup>	LDS (N=248) <sup>1</sup>	Early access consultation (N=342)
<b>Melanoma N(%)</b>	8 (0.5)	1 (0.4)	14 (4.1)
<b>NMSC N(%)</b>	31 (1.9)	7 (2.8)	31 (9.1)
<b>SCC N(%)</b>	30 (1.8)	7 (2.8)	12 (3.5)
<b>BCC N(%)</b>	1 (0.1)	0 (0)	18 (5.3)
<b>T-cell lymphoma N(%)</b>	0 (0)	0 (0)	1 (0.3)
<b>Overall detection rate</b>	39/1668 (2.3%)	8/248 (3.2%)	<b>45/342 (13.2%)</b>

## CONCLUSION

This study demonstrates that a lesion-directed approach in an early access consultation **is feasible and delivers a high skin cancer detection rate**. We believe this early access LDS may be a way to achieve cost-effective early detection of skin cancer in the general population. Future studies should address tools that can help to optimize the preselection of lesions for early access consultation.

## REFERENCES

1. Hoorens I, Vossaert K, Pijl L, Boone B, De Schepper S, Ongenaes K, Annemans L, Chevolet I, Brochez L. Total-Body Examination vs Lesion-Directed Skin Cancer Screening. JAMA Dermatol. 2016 Jan;152(1):27-34.