



## USE CASES

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**quantusSKIN**

*Medical Imaging with Artificial Intelligence*

# quantusSKIN — Detection of Malignant Skin Lesions

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## Product Description

quantusSKIN is a robust, fast, and easy-to-use test for the diagnosis and detection of malignant dermatological lesions. Using dermoscopic images or photographs taken with a smartphone or DSLR camera, it classifies the risk of malignancy for melanoma, basal cell carcinoma (BCC), and squamous cell carcinoma (SCC).

## Epidemiological Context

Melanoma and non-melanoma skin cancers are the most common malignant tumors in the Western world. Incidence is rising year after year due to increased sun exposure. Early diagnosis is critical: the 5-year survival rate for stage I exceeds 95%, but drops dramatically in advanced stages. The shortage of dermatologists and long waiting lists make quantusSKIN a tool of great clinical value.

## Use Cases

### CU-SKIN-01: Dermatological Screening in Primary Care and Family Medicine

|                    |                                                                                                                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stakeholders       | Primary care physician, nurse, patient with risk factors (low phototype, family history)                                                                                                                           |
| Main Workflow      | The healthcare professional takes a photo of the suspicious lesion using a smartphone or dermatoscope. The image is uploaded to quantusSKIN, and within minutes, a risk classification for malignancy is obtained. |
| Key Benefit        | Reduces unnecessary referrals to dermatology. Identifies high-risk lesions that require urgent biopsy. Does not necessarily require a dermatoscope.                                                                |
| Success indicators | Reduction in unjustified referrals, diagnostic sensitivity, time to biopsy for malignant lesions                                                                                                                   |

### CU-SKIN-02: Telederma and Remote Consultation

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| Stakeholders  | Telemedicine platform, remote dermatologist, patient in a rural area or with limited mobility                                                                                                                                            |
| Main Workflow | The patient photographs the lesion at home or at a participating pharmacy. The image is analyzed using quantusSKIN. The dermatologist receives the pre-analyzed report and conducts the teleconsultation based on objective information. |

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|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Key Benefit</b>     | Access to high-quality dermatological diagnosis without having to travel. Savings in time and resources. Greater geographic coverage of the healthcare system. |
| <b>Success Metrics</b> | Number of AI-assisted teleconsultations, rate of agreement with subsequent in-person diagnosis                                                                 |

### CU-SKIN-03: Support Tool for Melanoma Early Detection Campaigns

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| <b>Stakeholders</b>    | Cancer foundations, occupational health insurance providers, public health departments                                                                                                                                                     |
| <b>Main Workflow</b>   | During mass screening events (health fairs, companies, municipalities), healthcare professionals take images of citizens' pigmented lesions. quantusSKIN classifies the risk in real time and generates reports for the most urgent cases. |
| <b>Key Benefit</b>     | High-capacity screening in non-hospital settings. Public awareness. High cost-effectiveness per screening volume.                                                                                                                          |
| <b>Success Metrics</b> | Malignant lesions detected per campaign, cost per detected melanoma, ratio of urgent cases referred                                                                                                                                        |

### CU-SKIN-04: Integration into a Patient Health App (B2C)

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| <b>Stakeholders</b>    | End user (patient), uses a digital health app, health insurer, or wellness platform                                                                                                                                                          |
| <b>Main Workflow</b>   | The user takes a photo of a mole or spot with their smartphone and sends it to Telederma's WhatsApp number, which analyzes the image and returns a risk level along with a recommendation for action (follow-up, doctor's visit, emergency). |
| <b>Key Benefit</b>     | Empowers patients in their self-care. Long-term monitoring of lesions. Monetization channel for insurance companies and digital health platforms.                                                                                            |
| <b>Success Metrics</b> | Number of active users, conversion rate to medical consultation, user experience rating                                                                                                                                                      |

## CU-SKIN-05: Diagnostic Support in Hospital Dermatology Units

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| <b>Stakeholders</b>    | Hospital dermatologist, dermatology resident, cutaneous oncology unit                                                                                                                                                                    |
| <b>Main Workflow</b>   | In high-volume clinics, quantusSKIN pre-classifies the risk of all lesions photographed during the day. The dermatologist prioritizes attention on the highest-risk cases and documents their decision alongside the algorithm's report. |
| <b>Key Benefit</b>     | Increased dermatologist productivity. Reduced average consultation time. Objective documentation of the diagnostic process.                                                                                                              |
| <b>Success Metrics</b> | Lesions processed per hour, reduction in consultation time, agreement with final histology                                                                                                                                               |