

### What Does It Measure?

The Visiopor® PP 34N camera uses a specific **UV-light** to visualize the **fluorescing acne lesions** of an area of 6.4 x 8 mm. The orange-red fluorescence indicates the presence of **Propionibacterium acnes** within clinically non-evident (follicular impactions and microcomedones) and clinically evident (comedones, papules and pustules) lesions.

Acne is a common disorder of the pilosebaceous follicles with a multifactorial pathogenesis. It typically begins in adolescence when androgen hormones stimulate the production of sebum and proliferation of follicular epidermis. The openings of hair follicles become **clogged with oil secretion and corneocytes**. In consequence initially invisible lesions (microcomedones) and then clinically evident comedones develop. Microcomedones and

comedones are further colonized by P. acnes bacteria which promote inflamed **acne lesions** (papules and pustules) through the production of proinflammatory mediators, free fatty acids and porphyrins.

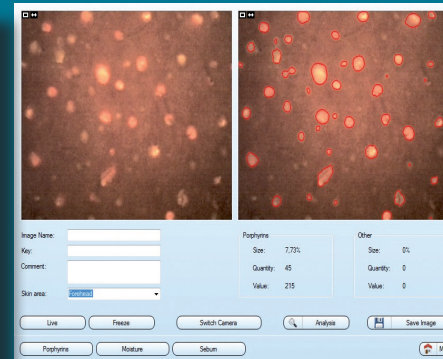
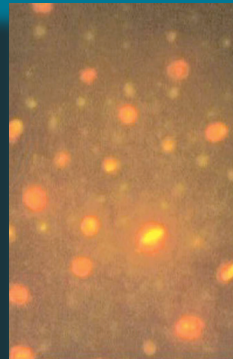
The **presence of porphyrins** can be demonstrated by orange-red fluorescence in the follicle openings by examining the skin under appropriate UV-A light. The intensity of follicular fluorescence and the extent of facial involvement are proportional to the population density of P. acnes and porphyrin content at the skin surface.

An improvement of acne is accompanied by significant reduction of the porphyrin concentration and the number of P. acnes, respectively.

### Advantages & Fields of Application

There are numerous applications in cosmetology, especially in the field of skin impurities.

- Detection of **early invisible lesions** and visualization of advanced small acne lesions in the esthetic field.
- **Efficacy testing** of anti-bacterial products and drugs against P. acnes.
- Determination of the comedogenic and **comedolytic activity** of topically applied products.
- **Non-invasive**, easy to use and economic.
- Comfortable software for the evaluation of the **number and size** of the fluorescent spots.
- Possibility of distinguishing between the red-orange spots (**porphyrins**) and the yellow-greenish spots (**others**).



### Technical Data

Dimensions: approx. 12 x 5.5 x 5.5 cm; Cable length 1.5 m; Illumination: 16 UVA- LEDs, 375...385 nm;  
 Measurement area: 6.4 x 8 mm; Resolution: 1280 x 1024; Camera button to freeze the image  
 Interface/Power supply: USB 2.0, type A connector;  
 Measurement principle: fluorescence  
 Computer: Windows® 10, performance must meet system requirements, USB 2.0; 3.0  
 Technical changes may be made without prior notice.

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