



## The Gynoscope™: a revolutionary colposcope with unmatched optical and video capabilities combined with a working space for interventional procedures

### About Us:

Illumigyn, a privately-held early stage company, has extended existing “Machine Vision” technologies from sophisticated manufacturing and military visual inspection applications into a state-of-the-art, compact imaging colposcope for medical applications in order to eliminate the inherent subjectivity of cervical exams.

### Scientific Advisory Board (SAB):

- Prof. Steven R. Goldstein, M.D. Professor of Clinical Obstetrics and Gynecology, New York University Medical Center
- Mark Spitzer, M.D. Chairman of Obstetrics and Gynecology – Brookdale University Hospital and Medical Center, Brooklyn, New York. Professor of Clinical Obstetrics and Gynecology Weill Medical College of Cornell University, New York
- Robert K. Zurawin, M.D. Associate Professor, Baylor College of Medicine Obstetrics & Gynecology
- Risa Kagan, M.D. Specializes in obstetrics & gynecology in Berkeley, California
- Rami Bali, M.D. Obstetrics and Gynecology Specialist. Heads the Women’s Health Center and is a Senior Adviser in Cervical Pathology for two of the four Health Service Providers in Israel

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### Background:

While cancer of the uterine cervix is the second most common cancer among women worldwide<sup>[1][2]</sup>, the intrinsic subjectivity of the cervical exam and of selecting the right biopsy sites limit diagnostic accuracy to 60%<sup>[3]</sup>. This misdiagnosis risks patients’ lives and costs the healthcare industry billions of dollars a year<sup>[4][5]</sup>.

### Introducing Gynoscope™:

Illumigyn’s Gynoscope™ is an advanced (patented) imaging colposcope that delivers down to 15 micron image resolution<sup>[6]</sup> over a wide field of view and a range of working distances, coupled with multispectral illumination options, in order to reduce the inherent subjectivity of colposcopy and cervical exams thus enabling early detection of cervical cancer while meaningfully reducing misdiagnosis. Further, the Gynoscope™ is the only colposcope that allows sophisticated imaging simultaneously with complex interventional procedures<sup>[7]</sup> to support the best clinical outcomes.

### Key Product Characteristics:

**Superb optical performance for the intended field of use:** superb performance is achieved through multispectral illumination options, wide field of view, working distance flexibility, and proximity to the examined tissue

**Integrated imaging and interventions:** the Gynoscope™ is the only colposcope that enables complex interventional procedures through the optical speculum simultaneous with sophisticated imaging<sup>[7]</sup>, so as to support the best clinical outcome

**Simple to operate:** auto identification of working distance, auto focus and auto illumination control

**Full digital suit that delivers better care:** digital images that can be saved, archived, retrieved, shared, followed and compared

**Modular:** upgradable platform that can support therapeutic, hysteroscopy and endoscopic applications

**Fully patented:** Illumigyn’s proprietary technology

- Not available for sale in the United States
- FDA has not yet cleared/approved the device

### Product Specifications:

The Gynoscope™ utilizes various magnification options for a wide range of working distances, with high performance optics along the entire field of view, and with low distortion for the full range of the visible spectrum. Key specifications:

**Multispectral illumination:** white, red, green, blue, infrared; ultraviolet for increased contrast

**Working distance:** 30-160 mm

**Horizontal field of view:** 30-78 mm<sup>[6]</sup>

**Resolution:** down to 15 micron<sup>[6]</sup>

**HD:** high resolution images and full HD video (1920 x 1080 pixels)

**Spectral range for image capture:** 430-880 nm

**Automation:** optical focus, illumination control and working distance all determined automatically and rapidly

**Digital:** fully digital solution from image capturing all the way to full HD video and images

**Optical speculum (patented):** supporting small, medium and large sizes

**Portable:** easily moved between examination rooms; hand carried

[1] Nat Rev Cancer. 2008 September; 8(9): 725-731

[2] WHO statistics state that over 490,000 new cases of cancer of the uterine cervix are diagnosed every year worldwide and that 275,000 deaths per year are attributed to this disease

[3] SAB information

[4] Medicare / Medicaid treatment cost for each missing detection is estimated at \$30,000 per patient (Women’s Health Issues. 2010 Nov-Dec;20(6):400-5. doi: 10.1016/j.whi.2010.07.002. Cost of cervical cancer treatment: implications for providing coverage to low-income women under the Medicaid expansion for cancer care)

[5] Cervical cancer treatment costs about \$2 Billion per year to the US Healthcare industry (CDC – National Breast and Cervical Cancer Early Detection Program – 2006-2007)

[6] Depends on the working distance

[7] Using standard gynecology tools

[8] Depends on the Field of View