The **Viewer** is a central part of Visiopharms end-to-end digital pathology solutions and is validated for in vitro diagnostic use (CE IVD) in Europe in combination with the CE IVD APPs from Visiopharm (ref. 1). All other applications are for Research Use Only.

Visiopharm technologies has implemented the widest support of whole slide formats and supports Field-Of-View (FOV) image types. Tailored for both diagnostic and research environments the **Viewer** supports bright-field, fluorescence as well as multispectral image modalities, which are presented with comprehensive possibilities for enhancements and adjustments.

### Advanced viewing with Viewer+

For advanced image analysis and APPs the **Viewer+** module allows alignment and co-registration in the **Tissuealign™** module and enables easy, robust, and automated tumor and stroma separation with **Virtual-DoubleStaining™**. The **Viewer+** also opens up for multiplexing between various types of staining methods with the Visiopharm **VirtualMultiplexing™** feature.

### Diagnostic Use

With **Viewer**, pathologists have all the tools necessary for on-screen rapid review and diagnosis. For automated image analysis Visiopharm offers a range of APPs and expansion modules, which can free up pathologist time and improve speed of throughput.
**Viewer Advantages:**

- Fast navigation innovated to new levels
- Clean full screen mode for ultimate overview of whole slides
- Detachable window for instant navigation and case overview
- Comprehensive set of tools for measuring and drawing of regions
- Widest range of supported file [vendor] formats incl. all major whole slide and FOV image types
- Optimized against all monitor sizes and resolutions including Ultra HD

**Viewer+ Advantages:**

- Extends the basic Viewer advantages
- APPs plug in for advanced automated analysis of various cell structures
- Allows viewing of multiple aligned case sections with the Tissuealign™ module
- Enables VirtualDoubleStaining™ and VirtualMultiplexing™ for easy identification of ex. tumor versus stroma areas
- Supports advanced analysis of TMAs in combination with the Tissuearray™ module
Research Use

For research use the ability to tailor all aspects of the image display and Viewer components assists researchers in their design and appliance of new algorithms and APPs.

Special tools enable direct measurement and display of distance, curve length, angle, radius, diameter, and area. Only one mouse click away in the very intuitive and easy-to-use wheel menu.

Wheel Menu

All annotations and image analysis findings are easily shown, hidden and transparency adjusted via the intuitive wheel menu, which opens up a rich set of tools for outlining of regions, measuring, annotations and support of quantitative image analysis.

Create a supreme overview by detaching the patient case and navigation windows. Every window can be separated out on individual monitors creating your own pathology cockpit.

The wheel menu when used in combination with the small navigation window offers a wealth of tools just at your fingertips. Allowing the user a supreme case overview.
Fluorescence Images

Viewing fluorescence images requires correct identification of color information, which is handled in the Viewer. Wavelengths and names of channels are read from image files and can be modified if necessary. The Viewer supports all color formats ranging from standard bright-field to high sensitivity multispectral images including fluorescence.

Multispectral Images

There is no limit to the number of color bands used in the Viewer. Most bright-field images are composed of three bands (Red, Green, Blue), but the Viewer can handle any number of bands, including combination of bright-field images and fluorescent channels. With the control of colors and stretch on each individual band the viewing possibilities are endless.

The Visiopharm APPs for Breast Cancer Ki-67, ER and PR are validated for in vitro diagnostic use (CE IVD) in Europe utilizing the Visiopharm Viewer (ref. 1). The Viewer can be used for “off the screen” diagnosing by any trained pathologist. For all other applications the Viewer can be used for Research Use Only.

Recommended minimum specifications for best performance:

- OS: Windows 10 – 64 bit
- CPU: Intel Core i7
- RAM: 8 GB
- Graphics: 512 MB RAM
- Available SSD space: 1 GB
- Screen: 27” Full HD/ Ultra HD

References