

## EasyOne Pro Software Version History

This document lists the most recent EasyOne Pro Software releases. The changes are cumulative, that means that changes introduced in a version are also included in later versions.

Version Date	Description
<b>(EOP) V3.04.00.23</b>  April 2018	<ul style="list-style-type: none"> <li>• Improved data handling and performance             <ul style="list-style-type: none"> <li>○ Keep your historic data by automatically importing existing tests as pdf's and attaching them to the patient history in EasyOne Connect</li> <li>○ Improved database performance to handle extremely large databases containing more than 100'000 patients (SQL Server)</li> </ul> </li> <li>• General Improvements and Bugfixes             <ul style="list-style-type: none"> <li>○ Fixed an issue where the user feedback was not correct on SVC tests with heavy tidal breathing</li> <li>○ Better alignment of FV and VT curves on the standard report</li> </ul> </li> <li>• New Windows operating systems patches for improved cybersecurity</li> </ul>
<b>(EOP) V3.03.00.11</b>  Nov 2017	<ul style="list-style-type: none"> <li>• Improved Provocation Testing Functionality             <ul style="list-style-type: none"> <li>○ Define and modify provocation protocols</li> <li>○ Added exercise provocation as new standard protocol</li> </ul> </li> <li>• Improved Reporting and Trending Capabilities             <ul style="list-style-type: none"> <li>○ Enter and trend external FeNO, MIP, MEP, SpO2 values add them to spirometry report and or transfer the values to the EMR system</li> <li>○ Automatically trend parameters of the last 5 tests on the standard PFT reports</li> <li>○ Possibility to visualize more parameters on the standard report</li> <li>○ Show Z-Score and %predicted simultaneously on all standard reports</li> <li>○ Generally improved report layouts by dynamically arranging graphs and tables</li> </ul> </li> <li>• Added new predicted equations and Operator's Manual languages             <ul style="list-style-type: none"> <li>○ Added the reference equations "Stanojevic (GLI, 2017)" for DLCO and lung volumes</li> <li>○ Included additional translations of the EasyOne Pro/LAB Operator's Manual</li> </ul> </li> <li>• General Improvements and Bugfixes             <ul style="list-style-type: none"> <li>○ Fixed an issue where changes in the configuration were only applied after a restart of the application</li> <li>○ Applied operating system security patches for better cybersecurity protection</li> <li>○ Extended configuration of "minimally required number of pre-washout breaths"</li> <li>○ Fixed an issue where for older device generations an update of the software caused DLCO tests to be unavailable</li> </ul> </li> </ul>

Version Date	Description
<b>(EOP) V3.02.00.06</b>  July 2017	<ul style="list-style-type: none"><li>• Improved reporting capabilities:<ul style="list-style-type: none"><li>○ Comments can be added much faster</li><li>○ Define standard text blocks and quickly add them to the report when needed</li><li>○ The highlighting color used to show abnormal results can now be defined in the configuration (e.g. black, red, etc.)</li></ul></li> <li>• Connectivity performance improvements:<ul style="list-style-type: none"><li>○ Increased the speed of an EasyWare database import</li><li>○ Fixed an issue with the import of very large EasyWare databases</li><li>○ Significantly increased the speed of loading the EMR order list</li><li>○ Fixed an issue where EMR orders could not be closed, when certain special signs were used in the comment section</li></ul></li> <li>• User interface improvements for Multiple Breath Washout:<ul style="list-style-type: none"><li>○ The MBW test incentive can now be switched between a larger target inspiratory volume and smaller target inspiratory volume</li><li>○ For MBW tests two lines are added on the screen that indicate 4 and 6% CO<sub>2</sub>, for better visibility of a physiological range</li><li>○ For MBW the last breath used for the calculation of LCI is now indicated on the display</li><li>○ For MBW tests, when zooming into the displayed curve, the visible breaths are indicated in the breath chart</li><li>○ Fixed an issue, where in some cases the volume curve would move outside of the visible range</li></ul></li></ul>

Version Date	Description
<p>(EOP) V3.01.00.01 May 2017</p>	<ul style="list-style-type: none"> <li>• Improvements in MBW: <ul style="list-style-type: none"> <li>○ Better review capability by adding the ability to zoom into curve data for MBW tests</li> <li>○ Better review capability by automatic scaling of the volume axis for MBW tests</li> <li>○ Automatic adjustment of target inspiratory volume based on patient height</li> <li>○ Better detection of patient hyperventilation by adding the ability to show the CO2 concentration of each breath</li> <li>○ Better export capabilities by adding the MBW curve data to the xml export</li> <li>○ Improved standardization by taking the N2 start concentration of MBW tests from the expiratory breath instead of the inspiratory breath</li> </ul> </li>   <li>• Improved Calibration Check functionality: <ul style="list-style-type: none"> <li>○ Flow targets now also meet the OSHA disability standard</li> <li>○ Additional multi flow calibration check option requiring only one trial</li> </ul> </li>   <li>• Improved performance and bug fixes: <ul style="list-style-type: none"> <li>○ Faster patient database search</li> <li>○ Better reporting capabilities by adding the possibility to show Z-score and % predicted at the same time on custom reports for DLCO and MBW tests</li> <li>○ Better handling of patients with birthday 29th of February</li> <li>○ Individual patients can now be exported from MS SQL server database</li> <li>○ Fixed an issue where in some cases the calibration check data could not be exported</li> </ul> </li> </ul>

Version Date	Description
<b>(EOP) V2.02.00.15</b>  August 2016	<ul style="list-style-type: none"> <li>• Z-score and improved reporting functionality:               <ul style="list-style-type: none"> <li>○ Z-score is now available on the display and on the report</li> <li>○ It is now possible to only show acceptable trials on the report</li> <li>○ Trial time can now be shown on the report</li> </ul> </li>   <li>• Improved user interface for MBW test:               <ul style="list-style-type: none"> <li>○ Added volume curve for the entire test</li> <li>○ Increased visibility of inhalation volume</li> <li>○ Rearranged the user interface during the test for better visibility</li> </ul> </li>   <li>• Support of new predicted values:               <ul style="list-style-type: none"> <li>○ New DLCO predicted values “Perez-Padilla / ALAT 2016” including altitude</li> </ul> </li>   <li>• Improved data handling:               <ul style="list-style-type: none"> <li>○ It is now possible to directly export and import individual patients with all tests</li> </ul> </li>   <li>• Improved cyber security:               <ul style="list-style-type: none"> <li>○ In order to better control access, permissions of different user groups can now be adjusted directly</li> <li>○ Additional logging of patient search activity</li> <li>○ Improved traceability in audit trail</li> </ul> </li>   <li>• Bug fixes:               <ul style="list-style-type: none"> <li>○ Fixed report error when all trials have been deleted</li> <li>○ Fixed error when searching patients in Allscripts</li> <li>○ Fixed unwanted duplication of patient records during import</li> <li>○ Fixed wrong error message during MBW test</li> </ul> </li> </ul>

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<p><b>(EOP)</b> <b>V2.01.00.09</b>  March 2016</p>	<ul style="list-style-type: none"> <li>• Improved usability of MBW measurement:                             <ul style="list-style-type: none"> <li>○ Easier completion of MBW tests through better handling of irregular breathing patterns.</li> <li>○ Improved usability by showing the N2 washout curve live on the screen during tests.</li> </ul> </li>   <li>• Improved connectivity:                             <ul style="list-style-type: none"> <li>○ Switching from EasyWare to EasyWare Pro (Easy on-PC) is now much easier. EasyWare databases can now be imported in Easy on-PC and EasyOne Pro / LAB.</li> <li>○ Summary interpretation of several tests is now available in the HL7 message</li> <li>○ “% Pre/Post” change is now available in the HL7 message</li> <li>○ Extended XML export (Technician, Reviewer, Modified)</li> <li>○ Bug fix in EMR review workflow</li> <li>○ Bug fix when SQL server is not connected during software start up</li> </ul> </li>   <li>• Improved performance:                             <ul style="list-style-type: none"> <li>○ Faster loading time for biological quality control</li> </ul> </li> </ul>
<p><b>(EOP)</b> <b>V2.00.01.05</b>  Sept. 2015</p>	<ul style="list-style-type: none"> <li>• Improved data performance and patient data encryption                             <ul style="list-style-type: none"> <li>○ Support of MS SQL Server database</li> <li>○ Improved performance for large databases and heavy multi user-access</li> <li>○ Improved encryption and support of SSL connections (MS SQL Server)</li> <li>○ Faster merging of databases</li> </ul> </li>   <li>• Support of new predicted publications and improved usability                             <ul style="list-style-type: none"> <li>○ New publication: JRS (Japan)</li> <li>○ New publication: Ip (Hong Kong)</li> <li>○ New publication: Chhabra (India)</li> <li>○ Fixed “out of memory” issue when updating predicted of tests</li> </ul> </li>   <li>• Additional language support                             <ul style="list-style-type: none"> <li>○ Added Chinese language</li> <li>○ Added Swedish language</li> </ul> </li>   <li>• Improved XML export                             <ul style="list-style-type: none"> <li>○ Added system interpretation</li> <li>○ Fixed “out of memory” problems for xml export of large databases</li> </ul> </li> </ul>

Version Date	Description
<b>(EOP)</b> <b>V1.9.0.19</b> Sept. 2014	<ul style="list-style-type: none"><li>• Improved Design &amp; Usability<ul style="list-style-type: none"><li>○ New clean and simple user interface</li><li>○ Improved test acceptability &amp; test messaging</li></ul></li> <li>• More Functionality<ul style="list-style-type: none"><li>○ DLCO curves included in XML export</li><li>○ Delete individual tests</li></ul></li> <li>• Improved Connectivity<ul style="list-style-type: none"><li>○ Improved XML connectivity workflow (direct printing)</li><li>○ Concurrent message handling improved for XML and HL7 connectivity</li><li>○ Support EasyOne screen connector and cradle for Windows 8</li><li>○ Fixed connectivity issue with EasyOne</li><li>○ Fixed connectivity issue with Allscripts Professional / Touchworks</li></ul></li></ul>