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Marico selects world-class ventilator and respiratory solutions

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Offers grants of total of INR 2.5 crores to fulfil immediate need of critical healthcare during COVID-19 pandemic



Marico Innovation Foundation (MIF), announced the conclusion of the #Innovate2BeatCOVID Grand Challenge with the selection of India's top 3 innovative 'Ventilators and Other Respiratory Solutions', offering INR 85 lakhs in grants.

This announcement comes on the heels of the last announcement, wherein INR 160 lakhs were disbursed as grants to 3 innovative 'Personal Protective Equipment (PPE)' category solutions. Committed to the cause of nation-building through innovation, Marico Innovation Foundation brought together a formidable group of interventionalists, pulmonologists, public health officials and healthcare industry leaders to identify effective and scalable solutions in response to the global pandemic.

Speaking on the initiative, Mr. Harsh Mariwala, Founder of Marico Innovation Foundation & Chairman of Marico Ltd said, "Through this challenge, we bring forth unique solutions that cater to the entire spectrum of current ventilator requirements all at a fraction of the cost of international counterparts. They are built by India with best in class features and technology with global applications. The devices are disruptive, accessible and affordable - which is exactly the need of the hour."

Marico Innovation Foundation will boost the efforts of the selected innovators by providing access to business opportunities, mentorship and guidance on business operations so that they can reach the right pockets of India. From the winning solutions identified, some devices are clinically validated and some are in the process of getting ISO certified in order to meet all the regulatory requirements. The innovations selected are geared to support the entire spectrum of patients and hospitals both from short term ventilation (during transit and home care) to in-patient wards where periodic ventilation is required and finally solutions for critical support in ICUs – and all this at competitive price points that match global standards. The solutions selected will help the Indian healthcare community stay prepared to tackle the rapidly rising number of COVID- 19 cases as we become the 3rd most-affected nation in the world.

Padma Vibhushan Dr. Raghunath Mashelkar, Hon' Chairperson of Governing Council of Marico Innovation Foundation and Jury chair for the Grand Challenge shared on the occasion, "At Marico Innovation Foundation, we have always considered innovation to be the keystone of progress, and what better way to use our wealth of experience working with innovations, than in the time of a crisis." He added, "Our collaboration with eminent industry experts, healthcare leaders along with A.T.E. Chandra Foundation has accelerated the process of finding the right innovations for the pandemic challenges. I am confident that these innovators are primed to make a difference and empower our frontline workers at different levels."

The winners under 'Ventilators and Other Respiratory Solutions' category include:

1. Shreeyash Electro Medicals has designed an indigenous ventilator with advanced features at par with most high-end, expensive imported ventilators and is available to hospitals at an attractive price that is ~20% of existing market prices to help fight the pandemic. It is suitable for both adult and paediatric ICUs across the globe and can be used in both invasive and non-invasive modes. Among other advanced technical features, one that stands out is the capability of the device to be set to an 'automatic ventilation' mode ensuring continued safe ventilation of an unattended patient. The device allows doctors to control for a wide range of both the volume of delivered air and the pressure that a patient may need, a feature commonly found only in high-end, expensive ventilators. They have successfully completed clinical validation and received endorsement by intensivists for use in ICU settings. They have also completed an approved registration of this ventilator with the Central Drugs Standard Control Organisation (CDSCO), India's national regulatory body for medical devices. They are currently undergoing testing for safety and essential performance of medical electrical equipment as per standard IEC 60601-1 by an NABL-accredited laboratory.
2. KPIT Technologies' solution is ergonomically designed and focuses on user-friendliness to create a completely automatic air compression mechanism that substantially reduces cost compared to traditional critical care ventilators. With these features, along with its unique cylindrical shape, KPIT's ventilator is portable and compatible for different settings including remote medical facilities, ambulances and home-care. The 13 kgs lightweight, yet mechanically sturdy device will be priced at ~30% of similar devices in the market. KPIT has secured calibration certification for its various features from an NABL-accredited laboratory. KPIT has also completed an approved registration of its ventilator with the Central Drugs Standard Control Organisation (CDSCO). It is currently undergoing testing for safety and essential performance of medical electrical equipment as per standard IEC 60601-1 by an NABL-accredited laboratory. KPIT is also undergoing clinical validation and is already seeing buyer interest for bulk-orders for their frugal innovation.

3. Nocca Robotics, has developed an ICU ventilator that can be used for invasive requirements. This is a turbine-based ventilator that eliminates the requirement of any compressed medical air to operate, an infrastructure that might be not available in many healthcare settings in India. The ventilator also comes with an in-built battery and claims to run the device for long hours in the event of a power cut-off. This device stands apart for being at par with most high-end, expensive imported ventilators, but is competitively priced at ~30% of its closest competitors' rate. The winning

solutions has successfully completed its clinical validation and is recommended to be used in ICU by intensivists after being tested on patients suffering from critical lung infection. The ventilator has been tested for safety and essential performance of medical electrical equipment by an NABL-accredited laboratory as per standard IEC 60601-1. The ventilator has also undergone endurance testing for more than 24 days at a hospital in Pune.

Mr. Amit Chandra, Vice-Chairperson, Marico Innovation Foundation, and Chairman Bain Capital India Office said, ""Our hope with these wonderful innovations is to see Indian entrepreneurs provide solutions that will address important healthcare needs - be it disruptive cost, comfort, or suffering of patient and frontline workers."

Marico Innovation Foundation has always been committed to fostering innovation and solving societal and humanistic challenges faced by our nation. As such the foundation has worked with over 100 innovations over the last two decades in order to make a positive, measurable, and sustainable impact on the world we inhabit. During the pandemic too, the foundation rallied together to call forth innovators and was able to identify 6 ingenious and unique solutions that respond to the most pressing challenges faced by our healthcare and frontline communities. The foundation continues to work closely with these innovators to swiftly scale them up. The efforts include helping build operational efficiencies, connections with relevant buyers, and B2B business opportunities.