



5.4M ASTHMA SUFFERERS IN UK, OF WHICH 250,000 HAVE SEVERE ASTHMA



DUE TO **LACK OF STRATIFYING DIAGNOSTICS** CURRENT **INTERNATIONAL ASTHMA GUIDELINES** ADVOCATE A '**TRIAL** AND **ERROR**' APPROACH WITH PROGRESSIVE ESCALATION OF TREATMENT



THE **NHS** SPENDS

TREATING AND

CARING FOR PEOPLE WITH ASTHMA

BILLION A YEAR



THERE IS AN URGENT NEED TO DEVELOP INNOVATIVE DIAGNOSTIC TOOLS TO MATCH THE RIGHT PATIENT WITH THE RIGHT TREATMENT

EVERY TIME WE **BREATHE** OUT THERE ARE **HUNDREDS** OF **CHEMICALS** ON OUR BREATH.



SOME COMPOUNDS ON BREATH HAVE THE POTENTIAL TO BE USED TO DISTINGUISH CLINICAL PHENOTYPES IN ASTHMA AND COULD HELP TOPREDICT WHO WILL RESPOND TO CURRENTLY AVAILABLE STEROID TREATMENT.



THAN EXISTING TECHNOLOGIES



OWLSTONE MEDICAL IS WORKING TO DEVELOP A BREATHALYZER TO DETECT VOLATILE BIOMARKERS OF ASTHMA



U-BIOPRED IS A EUROPEAN CONSORTIUM WHICH HAS BEEN RUNNING FOR THE LAST 4 YEARS. AT THE SEPTEMBER 2015 **ERS** CONFERENCE THEY REPORTED HOW **OUR TECHNOLOGY** COULD BE USED TO **STRATIFY ASTHMATIC PATIENTS** INTO SUB-GROUPS, ACCORDING TO WHICH TYPE OF TREATMENT THEY ARE MOST LIKELY TO BENEFIT FROM.

THE GOAL OF STRATA IS TO MOVE THERAPY FROM A 'TRIAL AND ERROR' APPROACH TO ONE THAT SELECTS THE MOST APPROPRIATE ASTHMA TREATMENT, INCREASING THE OVERALL SUCCESS RATE OF TREATMENT AND REDUCING THE NUMBER OF ADVERSE EVENTS FOR PATIENTS AND COSTS TO THE NHS.

OWLSTONE IS WORKING WITH UK **ENABLING INFRASTRUCTURE** PARTNERS (NIHR DEC, MRC EMBER, MRC, RASP-UK, MHRA) TO **ACCELERATE TIME** TO DEPLOYMENT IN HOSPITALS AND GP SURGERIES.

