

# The body is built to communicate what's going on inside.

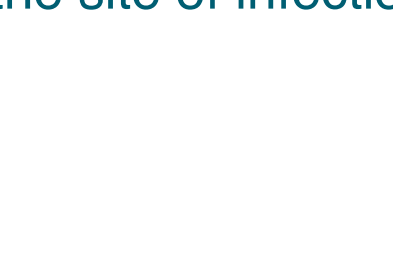
## Our mission is to listen.

MeMed listens to the language of the body to solve big problems of 21<sup>st</sup> century medicine.

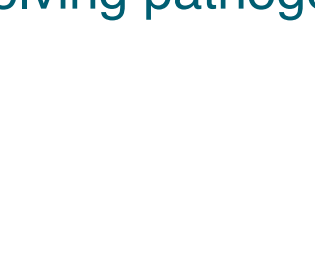
### MeMed's host immune response technology can overcome limitations of current diagnostic challenges



Rapid results



No need to access the site of infection



Detects responses to evolving pathogens



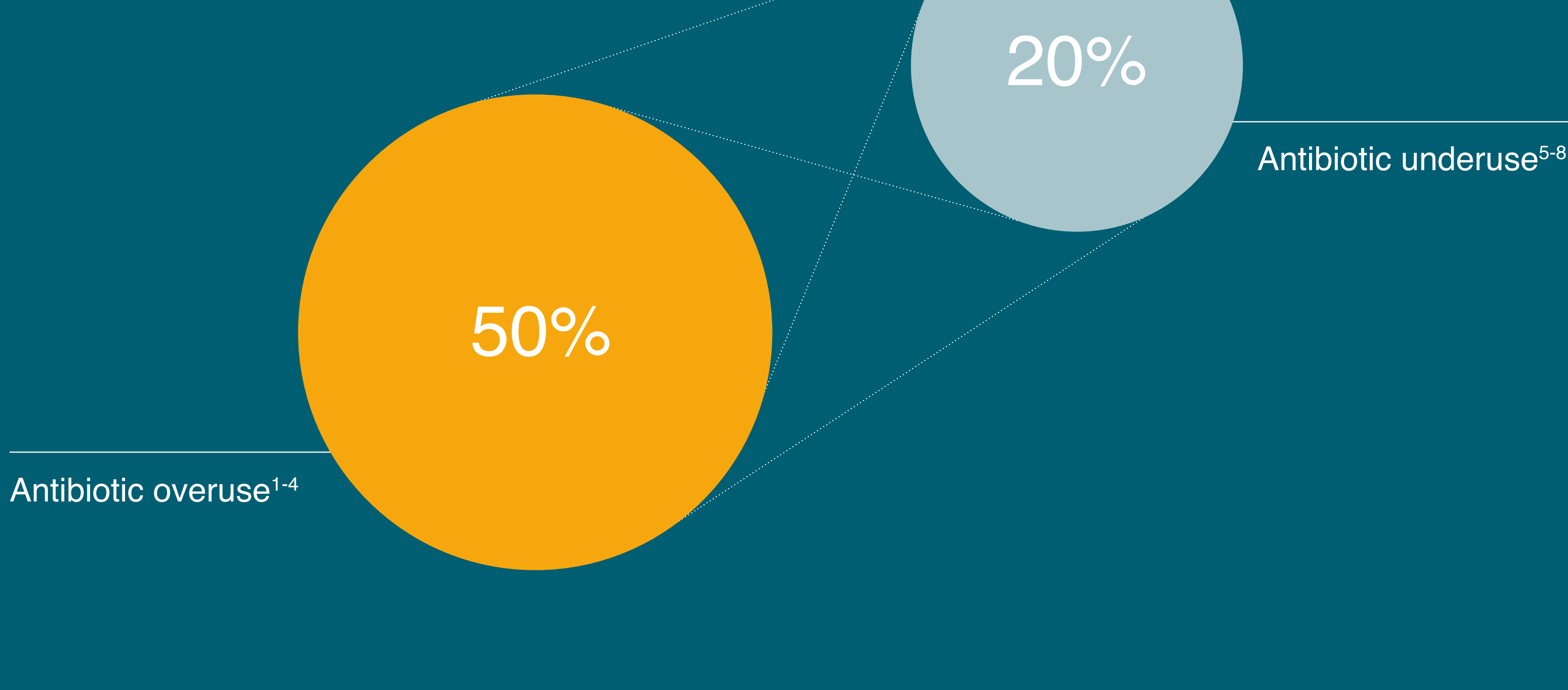
Robust to colonizers

### The first clinical dilemma we help address: bacterial or viral?

Since bacterial and viral infections are clinically indistinguishable, physicians are often challenged to decide whether to treat or not with antibiotics. By providing host response information, we help physicians make more informed decisions about how and when to treat.



### As a result, antibiotics are the most misused drugs:

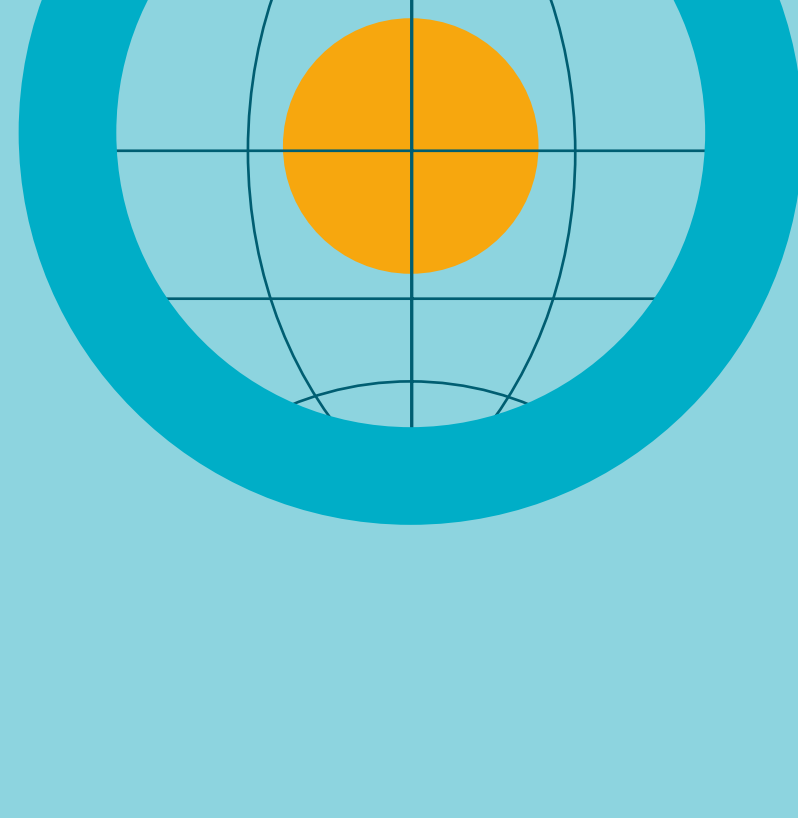


### Antimicrobial Resistance (AMR) is one of the biggest health challenges of our time

#### By 2050:

**\$100 Trillion**

cumulative GDP loss due to AMR<sup>9</sup>



**10 Million**

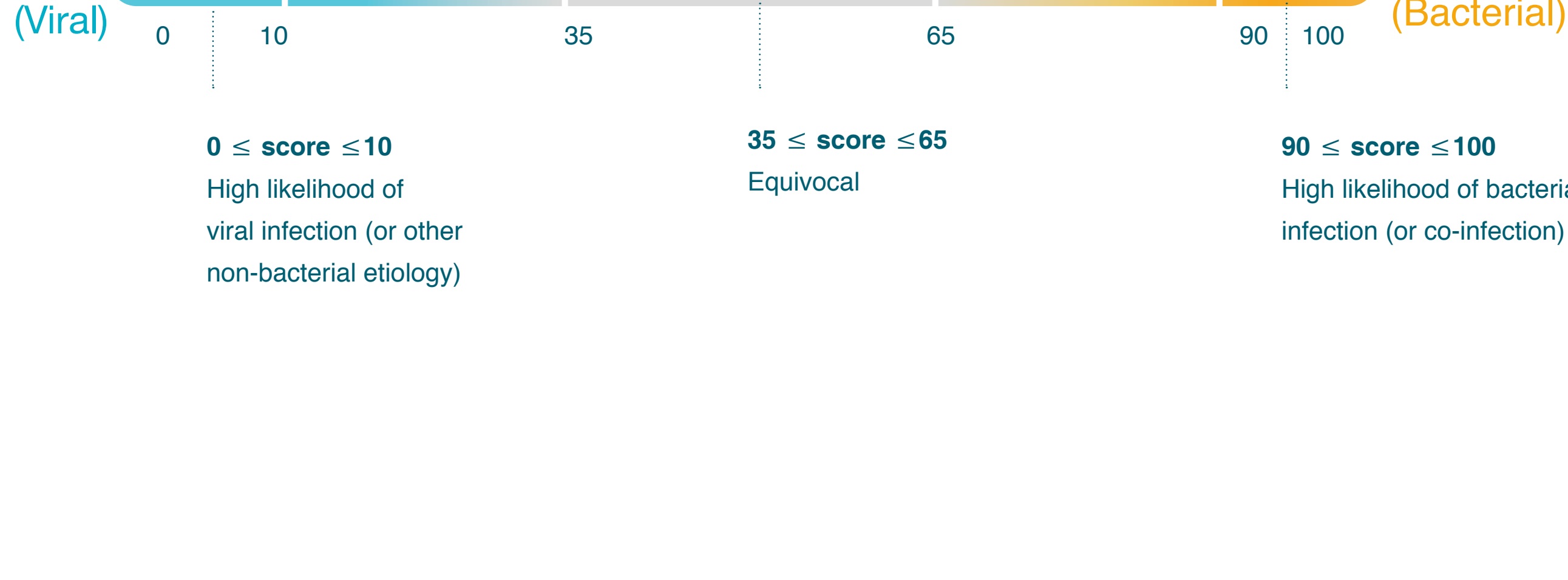
annual deaths will be caused by AMR - greater than the number of deaths caused by cancer and diabetes combined<sup>9</sup>

### Our Solution:

#### Three Biomarkers + Machine Learning = MeMed BV™

Making the bacterial vs. viral decision is a complex challenge and there is no single biomarker that is sufficiently accurate enough to support this decision. Using a large-scale discovery process, MeMed has identified three host immune proteins that together provide the optimal basis for helping to resolve the bacterial vs. viral dilemma with an accurate resolution.

These proteins are: TRAIL (TNF-related apoptosis-inducing ligand), IP-10 (Interferon gamma-induced protein 10), and CRP (C-reactive protein). Each of the proteins presents different dynamics in response to a bacterial or viral infection. From a small serum sample, MeMed BV computationally integrates the levels of the three proteins into a simple score indicating the likelihood of a bacterial immune response versus a likely viral or mixed infection immune response.



The MeMed BV test has the potential not only to reduce antibiotic overuse, but also to reduce occurrence of complications associated with antibiotics.



The test's performance is robust across > 30 pathogens, including, but not limited to, influenza, RSV, strep, adenovirus, and human coronaviruses.<sup>10</sup>

### The first B vs. V test clinically validated to the highest standard with studies that are:

- Double-blind
- Multinational
- Prospective
- External
- Encompassing > 18,000 enrolled patients<sup>11, 12, 13</sup>

### Accuracy and reliability <sup>11,12,13</sup>



### MeMed BV's test performance is robust across:

- Sexes
- Adults & children 3 months and older
- Inpatient and outpatient clinical settings, including EDs, hospital wards and urgent care centers
- Mixed infections
- Time from symptom onset

### Data from studies<sup>10,13</sup> show that the MeMed BV signature compares favorably to other biomarkers



### We research the body's host response signals everyday, so the results become part of everyday care.

Our mission is to decode the complex signaling of the human body and find clinical insights that transform the treatment of infection and inflammation. Our results have been validated in global studies involving thousands of patients, published in peer-reviewed journals and recognized by prestigious health agencies.

#### Broad dynamic range

MeMed Key™ has a wide dynamic range from pg/ml to µg/ml, which opens the way to performing host and pathogen-based immunoassays that are often only available at a central laboratory.

#### Accuracy

MeMed Key provides accuracy similar to large central lab immunoassay platforms in a miniaturized and point of need platform.

#### Speed

MeMed Key is designed to provide test results at the point of need in <15 minutes.

#### Easy to use

MeMed Key has an easy to use Graphical User Interface (GUI) and sample to result workflow.

#### Maintenance-free

MeMed Key does not require loading of any chemical reagents, consumables, waste handling or other maintenance duties.

#### Compact

- Height: 9.84 in.
- Width: 9.84 in.
- Depth: 13.4 in.
- Weight: 17 lb.



### MeMedKey

#### Central lab precision at the point of need

MeMed Key runs the MeMed BV test in just 15 minutes, where and when it actually matters.

MeMed Key is a cutting edge, compact immunoassay platform that makes it possible on magnetic beads and chemiluminescence technology that makes it possible to conduct highly sensitive, rapid, multiplexed protein measurements that previously could only be done on expensive central lab equipment.



### MeMed BV and MeMed Key have received the CE mark.

### Working to address the COVID-19 challenge

Initial data from a prospective study shows that serial and rapid measurements of IP-10 can be a valuable resource for early detection of disease severity and progression, monitoring inflammatory status and personalizing treatment strategies for patients with severe COVID-19.

Additionally, IP-10's role as an indicator of an infectious process, as well as its elevated levels in flu, COVID-19, SARS, and MERS patients are currently under investigation.<sup>14</sup>

Also being investigated is the correlation between low levels of TRAIL and severe outcomes, as well as prolonged viral clearance.

MeMed Key is the sole CE regulatory cleared platform that provides a bacterial likelihood score for in-vitro diagnostic use in clinical settings as well as the individual analyte levels (for CRP, IP-10 and TRAIL) that constitute the score.

MeMed BV and MeMed Key are not approved or commercially available for these investigational uses.



#### References:

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