MajesTEC-9: A Phase 3 Randomized Study of Teclistamab Monotherapy vs Investigator's Choice of Pomalidomide, Bortezomib, and Dexamethasone or Carfilzomib and Dexamethasone (PVd/Kd) in Patients With Relapsed Refractory Multiple Myeloma

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WHAT DO THESE RESULTS MEAN?

Teclistamab alone helped people living with relapsed refractory multiple myeloma, previously treated with 1 to 3 lines of therapy (including an anti-CD38 monoclonal antibody and lenalidomide), live longer without their myeloma getting worse compared with other commonly used combination therapies. Side effects were consistent with those already known for teclistamab and can be managed safely

This study, along with an earlier study of teclistamab with daratumumab (called the MajesTEC-3 study), demonstrates that teclistamab-containing treatments should be a new common option for people living with relapsed refractory multiple myeloma, no matter where people receive care

WHAT WAS THE PURPOSE OF THIS STUDY?

- Researchers wanted to evaluate whether 1 drug, teclistamab, worked better than other commonly used therapies for the treatment of people with **relapsed refractory** multiple myeloma who had already received 1 to 3 **lines of therapy**, including an **anti-CD38 monoclonal antibody** and lenalidomide (drugs for the treatment of multiple myeloma)

WHO WAS IN THE STUDY AND HOW WAS IT CARRIED OUT?

- MajesTEC-9 (NCT05572515) was conducted by randomly assigning people with relapsed refractory multiple myeloma to receive either teclistamab (known hereafter as "Tec"), or pomalidomide plus bortezomib and dexamethasone or carfilzomib and dexamethasone (known hereafter as "PVd/Kd")
  - Approximately 80% of people in the study had stopped responding to lenalidomide or an anti-CD38 monoclonal antibody

People with relapsed refractory multiple myeloma and 1-3 prior lines of therapy, including an anti-CD38 monoclonal antibody and lenalidomide

People in the study were assigned to a treatment group

Tec **OR** PVd/Kd

People assessed in the study

- The main goal of this analysis was to determine if Tec alone was better at delaying the time before the multiple myeloma got worse or a person died, compared with the commonly used PVd/Kd combinations

WHAT WERE THE RESULTS?

The study found that Tec alone substantially improved survival benefits compared with other commonly used combination therapies and helped people live longer overall and without their disease getting worse

Figure 1: Progression-free survival

Figure 2: Response and minimal residual disease negativity

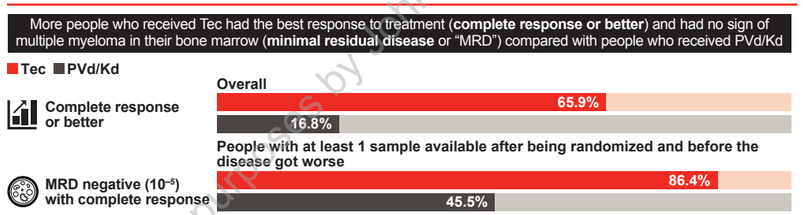


Figure 3: Overall survival

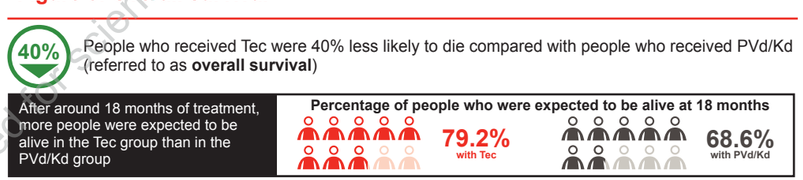


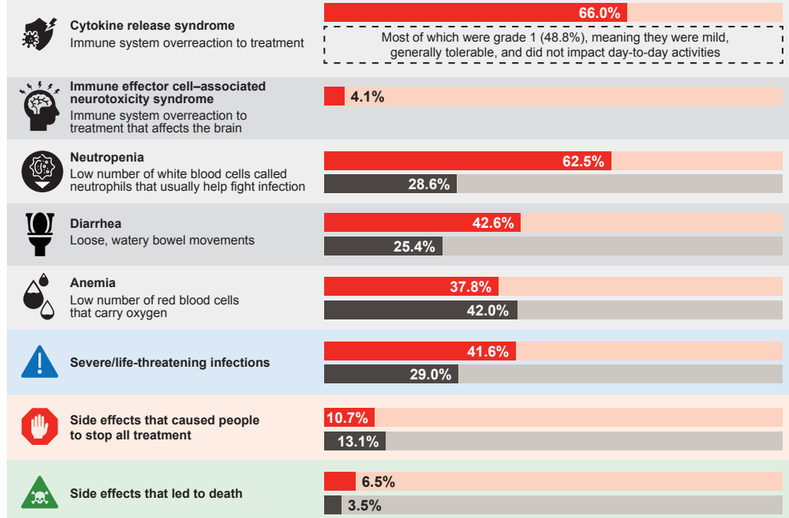
Figure 4: Side effects

Tec alone had a safety profile that was consistent with that already known, with cytokine release syndrome (immune system overreaction to treatment) being the most common side effect with Tec

Infections were common in both treatment groups, including infections that were severe and life-threatening for some people

The number of severe and life-threatening infections decreased over time

People receiving Tec should be supported with established infection protocols, such as the use of antimicrobial prophylaxis (the use of germ-fighting medicines early on to prevent infection) and immunoglobulin treatment (where concentrated antibodies are given to help the body fight or prevent disease) to help prevent infections



Glossary of terms

Relapsed	Multiple myeloma returned after initial improvement	**Refractory**	When the multiple myeloma has stopped responding to treatment	**Anti-CD38 monoclonal antibody**	A type of protein made in the lab that can bind to substances in the body; in this case, the monoclonal antibody binds to CD38, a protein found on the surface of cancer cells and other cells throughout the body. An example of this is the drug called daratumumab	**Line of therapy**	This is the sequence of treatments given to a person, often numbered as first line, second line, etc	**Median follow-up**	The middle value in the range of follow-up times for people in the study
Median progression-free survival	The length of time until half of the people have lived without their multiple myeloma returning, growing, or spreading, while the other half have experienced worsening of their disease	**Overall survival**	Length of time a person survived since treatment started	**Complete response or better**	Using specific criteria and tests, doctors can determine how well the multiple myeloma is responding to treatment. People with a complete response or better have all signs of myeloma gone from the blood and bone marrow after treatment	**Minimal residual disease**	Measurement of the number of multiple myeloma cells that may be left in the person's bone marrow (spongy portion of the bone) after treatment. Minimal residual disease negativity at 10^{-5} is when no myeloma cells are found in 100,000 healthy bone marrow cells after treatment. People with an "MRD-negative complete response or better" have no signs of myeloma in their blood and in the bone marrow after treatment around the same time		

*AI was used in the preparation of these summaries.