UNDERSTANDING CHANGES TO LUNG FUNCTION TEST REPORTS

An important part of managing cystic fibrosis is understanding how well your lungs are working now and over time. Lung health is often measured by a lung function test called spirometry. This handout explains spirometry results and changes you may see in your report.

WHAT IS CHANGING?

- To see how well your lungs are working, your care team uses your spirometry results. They compare your lung function to people who do not have a lung condition, but are like you in age, height, sex at birth, and race. This comparison is called % predicted.
- We now know that comparisons using race can lead to incorrect readings of lung health. Removing race gives a better comparison of lung function for your age, height, and sex at birth.
- This change will affect how your care team reads your spirometry results. To interpret your results, your care team may use the % predicted numbers. There may be a change to your % predicted.
- The measurement of your actual (or "absolute") lung function will not change. This is the amount of air you blow as measured in liters (L).
- Below is an example. % predicted may go up or down. Absolute lung function will not change.

	OLD EQUATION (GLI 2012)	NEW EQUATION (GLI 2022)	CHANGE
ABSOLUTE LUNG FUNCTION IN LITERS (FEV_1)	3.5 L	3.5 L	None
FEV_1 % PREDICTED	88%	78%	Decrease of 11%

These values are an example only and do not reflect the results of an actual patient with CF.

HOW THIS CHANGE MAY AFFECT YOU

Your CF care team can help you understand your spirometry report.

- Ask a member of your CF care team, like your respiratory therapist or pulmonologist, to review your spirometry report with you. You may want help understanding:
  - Compared to people like me who do not have CF, are my lungs better, worse, or the same?
  - Compared to my earlier results, are my lungs better, worse, or the same?
  - Based on these new % predicted numbers, what, if any, changes should be made to my treatment plan?
  - Based on these new % predicted numbers, will my ability to take part in clinical trials change?

Together with your CF care team, understanding your lung function can help you manage your health.

Additional Resources:
For more on pulmonary function tests from the American Thoracic Society, visit:
https://www.thoracic.org/patients/patient-resources/resources/pulmonary-function-tests.pdf

For more on managing your health with CF from the Cystic Fibrosis Foundation, visit:
https://www.cff.org/managing-cf

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