

Expert Statement: Pneumothorax Associated with One-Way Valve Therapy for Emphysema: 2020 Update.

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Karger AG, Basel 2021 For selected patients with advanced emphysema, bronchoscopic lung
volume reduction with one-way valves can lead to clinically relevant improvements of airflow
obstruction, hyperinflation, exercise capacity, and quality of life. The most common complication of
this procedure is pneumothorax with a prevalence of up to $\pm 34\%$ of the treated patients. Patients
who develop a pneumothorax also experience meaningful clinical benefits once the pneumothorax
is resolved. Timely resolution of a post-valve treatment pneumothorax requires skilled and
adequate pneumothorax management. This expert panel statement is an updated recommendation
of the 2014 statement developed to help guide pneumothorax management after valve placement.
Additionally, mechanisms for pneumothorax development, risk assessment, prevention of
pneumothorax, and outcomes after pneumothorax are addressed. This recommendation is based
on a combination of the current scientific literature and expert opinion, which was obtained through

a modified Delphi method.