## **Practical Approach to Interventional Bronchoscopy Procedural Decision Making:** Scenario # 12: Malignant pleural effusion with opacification of the right hemithorax

Based on the information presented below, please describe your procedural decision making using The Practical Approach to Procedural Decision making. Do your best to complete each item of the Four Boxes. If the case scenario contains no information pertaining to an item, please address it as NOT AVAILABLE. Note that each case scenario may have greater emphasis on one or more items listed in the "Practical Approach".

LL is a 43 woman with a history of breast cancer metastatic to the lungs who presents with shortness of breath and right sided pleuritic chest pain. She underwent a right sided mastectomy and chemotherapy 3 years earlier. She lives abroad, but is visiting her son in the United States. In her country of origin, several thoracenteses were performed, but results of the pleural fluid analysis are not available. The family reports a rapidly declining functional status and increasing dyspnea. On Physical examination her vital signs are normal. She is Spanish-speaking and, appears older than her stated age. She has mild bi-temporal wasting, decreased right-sided breath sounds, with dullness to percussion over entire right lung field, and a normal cardiac exam. Her chest wall demonstrates evidence of right breast mastectomy, the abdomen is benign, and there is no extremity edema. The chest radiograph shows near complete opacification of the right hemi-thorax. A chest CTshows a massive right pleural effusion filling the right hemi-thorax, with leftward mediastinal shift and a rim of soft tissue thickening in the pleura. A diagnostic and therapeutic thoracentesis reveals an exudative effusion. Cytology demonstrates malignant cells consistent with primary breast cancer. The patient wants her dyspnea treated and wishes to return to her home country as soon as possible.



## After addressing items of the four boxes, please consider the following:

- Describe the clinical relevance of malignant pleural effusion
- Describe the role of bronchoscopy in patients with malignant pleural effusions.
- Describe an appropriate choice of palliative treatments available for a patient with malignant pleural effusion.

## Practical approach, Bronchoscopy International©

Initial Evaluation	Procedural Strategies
<ol> <li>Physical examination, complementary tests, and functional status assessment</li> <li>Patient's significant co-morbidities</li> <li>patient's support system (also includes family)</li> <li>Patient preferences and expectations (also includes family)</li> </ol>	<ol> <li>Indications, contraindications, and expected results</li> <li>Operator and team experience and expertise</li> <li>Risk-benefits analysis and therapeutic alternatives</li> <li>Respect for persons (Informed Consent)</li> </ol>
Procedural Techniques and results	Long term Management Plan
<ol> <li>Anesthesia and other perioperative care</li> <li>Techniques and instrumentation</li> <li>Anatomic dangers and other risks</li> <li>Results and procedure-related complications</li> </ol>	<ol> <li>Outcome assessment</li> <li>Follow-up tests, visits, and procedures</li> <li>Referrals to medical, surgical, or palliative/end of life subspecialty care</li> <li>Quality improvement and team evaluation of clinical encounter</li> </ol>

PROCEDURAL STRATEGIES

**INITIAL EVALUATION** 

PROCEDURAL TECHNQUES AND RESULTS

LONG TERM MANAGEMENT PLAN