

Table 4. Pulmonary Toxicity Associated with Antimetabolite Chemotherapeutic Agents

Chemotherapeutic Agent	Clinical syndromes	Potential risk factors
Methotrexate	<ul style="list-style-type: none"> • Hypersensitivity pneumonitis 	<ul style="list-style-type: none"> • Older age • Renal insufficiency • Hypoalbuminemia • Prior use of rheumatoid disease-modifying drugs • Rheumatoid pleuropulmonary disease • Diabetes • Concomitant use of drugs that decrease renal excretion or protein binding
	<ul style="list-style-type: none"> • Interstitial pneumonitis/ pulmonary fibrosis 	
	<ul style="list-style-type: none"> • Bronchiolitis obliterans organizing pneumonia 	
	<ul style="list-style-type: none"> • Acute respiratory distress syndrome 	
Cytosine arabinoside	<ul style="list-style-type: none"> • Acute or subacute noncardiogenic pulmonary edema 	<ul style="list-style-type: none"> • Dose intensity
	<ul style="list-style-type: none"> • Bronchiolitis obliterans organizing pneumonia 	<ul style="list-style-type: none"> • Concurrent treatment with anthracyclines or interferon-alpha
Gemcitabine	<ul style="list-style-type: none"> • Interstitial pneumonitis/pulmonary fibrosis • Noncardiogenic pulmonary edema • Pleural effusion 	<ul style="list-style-type: none"> • Concurrent treatment with bleomycin, taxanes, vinorelbine • Prior, current, or post-treatment therapeutic thoracic irradiation
Fludarabine	<ul style="list-style-type: none"> • Interstitial pneumonitis 	