

## BUSTA A

### 1. Descrivere il significato biologico e ruolo clinico della calprotectina fecale

#### LETTURA E TRADUZIONE

##### **Biomarker Utilization at Time of Cancer Diagnosis**

At the time of initial diagnosis, baseline biomarker measurement (troponin and NP) can complement a patient's cardiovascular history and physical examination to help detect those at increased risk of developing cardiac dysfunction or those with pre-existing subclinical disease. These patients may benefit from cardioprotective medications and/or more frequent monitoring during or following cancer treatment. Biomarkers measured at baseline also provide a helpful reference for patients with possible cardiotoxicity after initiating cancer treatment.

F.to La Commissione

## BUSTA B

### 1. Allestimento di un campione per valutazione tramite Saggio ELISA.

#### LETTURA E TRADUZIONE

##### **Biomarker Utilization at Time of Cancer Diagnosis**

There is no evidence that elevated baseline biomarkers in isolation should influence the decision for, or choice of, cancer treatment. Conversely, baseline risk assessment using biomarkers can be valuable to guide monitoring and screening intervals, cardiovascular risk factor optimization, and potentially identify those most likely to benefit from cardioprotective medications as an adjunct to their cancer treatment. Cancer therapy decisions should always be done in a multidisciplinary fashion (including Hematology/ Oncology and Cardiology) with appropriate recognition of the potential survival prolonging benefit of cancer therapy relative to the potential for, or even presence of, cardiovascular toxicity.

F.to La Commissione

## BUSTA C

### 1. Descrivere i potenziali marcatori di alterata permeabilità intestinale

#### LETTURA E TRADUZIONE

##### Biomarker Assays

When interpreting and comparing biomarker research, it is important to recognize that there is significant variance in biomarker assays and normal reference ranges across different studies and cancer centers. Confounding this issue, traditional troponin assays have more recently been replaced by high-sensitivity assays, allowing for detection of only subtle troponin levels not previously possible in early cardiotoxicity studies. These issues impact generalizability of study findings and must be considered when translating research findings to clinical practice.

F.to La Commissione

## BUSTA D

### 1. Allestimento di campioni biologici per effettuare un'analisi in Western Blotting

#### LETTURA E TRADUZIONE

#### Radiation-Induced Cardiovascular Disease

Over half of patients with thoracic cancer will be treated with radiation therapy (RT), which can result in incidental radiation to cardiac tissue. Consequently, an estimated onethird of thoracic cancer patients undergoing RT will develop radiation-induced cardiovascular disease (RICVD), which can include coronary artery disease, conduction abnormalities, myocardial fibrosis, peripheral vascular disease, and pericarditis [95]. The underlying pathophysiology of RICVD involves both direct damage to nucleic acids and biomolecules and indirect cellular injury via generation of reactive oxygen species, danger-associated molecular patterns, and other inflammatory factors.

F.to La Commissione