6. Rello J, Soñora R, Jubert P, Artigas A, Rué M, Vallés J. Pneumonia in intubated patients: role of respiratory airway care. *Am J Respir Crit Care Med* 1996;154:111–115.
7. Brisson H, Bouhamed B, Lu Q, Rouby JJ. Comparison of two automated endotracheal cuff pressure regulator devices in intubated critically ill patients: mechanical and electronic [abstract]. *Intensive Care Med* 2011; 37:296.

Copyright © 2012 by the American Thoracic Society

Interpreting Success or Failure of Neurally Adjusted Ventilatory Assist

To the Editor:

We read with interest the article by Rozé and coworkers (1) describing a patient with postextubation respiratory failure under noninvasive neurally adjusted ventilatory assist (NIV-NAVA). After stable diaphragm electrical activity (EAdi), tidal volume (V_T), and respiratory rate, both EAdi and V_T decreased, and oxygen saturation dropped. The authors suggest low frequency fatigue of the diaphragm and/or reduced activity of the respiratory centers as possible causes. We would like to comment on the interpretation provided by Rozé and colleagues.

Contractile "low-frequency" fatigue of the diaphragm is characterized by a decrease in force for a given EAdi; that is, impaired neuromechanical efficiency (2). An expected consequence of impaired neuromechanical efficiency is reduced V_T for a given EAdi; that is, impaired neuroventilatory efficiency. With contractile fatigue one would expect a maintained or increased EAdi with a reduction in V_T, rather than a decrease in V_T and EAdi in tandem.

The relatively high respiratory rate, low V_T, and elevated Pa_{CO_2} early after extubation raises the question of whether the NAVA level was set to adequately meet the patient's demand. Too low a NAVA level may result in insufficient respiratory muscle unloading (3, 4). It would be interesting to know how the NAVA level was selected.

Although inter-individual comparability is limited, the reported EAdi level of about 11 μV is within the normal range for patients assisted with NAVA, and contradicts the presence of high efforts causing contractile fatigue. Thus, excessive muscle metabolism reducing muscle fiber excitability seems unlikely. It would be interesting to know the highest EAdi level observed.

As the authors point out, the decrease in EAdi suggests suppression of central respiratory drive. Would there be any inadvertent cause for this (e.g., administration of sedative drugs)?

Expiratory flow resistance due to tracheomalacia may provide another mechanism contributing to respiratory failure. However, in the case of hyperinflation-induced weakening of inspiratory muscles, one would also expect less V_T for a given EAdi.

We certainly agree that care should be taken when using NAVA in patients with neuromuscular dysfunction. Nevertheless, we recently demonstrated that in most such patients neuromuscular dysfunction *per se* does not preclude titration of the assist level and prolonged implementation of NAVA (5).

The report by Rozé and coworkers underlines the importance of integrating a wide number of parameters and clinical information related to the control of breathing when using the neural drive to control a ventilator and when interpreting efficiency or failure of such an approach.

Author disclosures are available with the text of this letter at www.atsjournals.org.

Lukas Brander, M.D.
Luzerner Kantonsspital
Luzern, Switzerland

Jennifer Beck, Ph.D.
Christer Sinderby, Ph.D.
University of Toronto
Toronto, Ontario, Canada
and
Keenan Research Center at the Li Ka Shing Knowledge Institute of St. Michael's Hospital
Toronto, Ontario, Canada

References

1. Rozé H, Marie Richard JC, Mercat A, Brochard L. Recording of possible diaphragm fatigue under neurally adjusted ventilatory assist. *Am J Respir Crit Care Med* 2011;184:1213–1214.
2. Doorduin J, Sinderby CA, Beck J, Stegeman DF, van Hees HW, van der Hoeven JG, Heunks LM. The calcium sensitizer levosimendan improves human diaphragm function. *Am J Respir Crit Care Med* 2012;185:90–95.
3. Lecomte F, Brander L, Jalde F, Beck J, Qui H, Elie C, Slutsky AS, Brunet F, Sinderby C. Physiological response to increasing levels of neurally adjusted ventilatory assist (NAVA). *Respir Physiol Neurobiol* 2009;166:117–124.
4. Brander L, Leong-Poi H, Beck J, Brunet F, Hutchison SJ, Slutsky AS, Sinderby C. Titration and implementation of neurally adjusted ventilatory assist in critically ill patients. *Chest* 2009;135:695–703.
5. Tuchscherer D, Z'Graggen WJ, Passath C, Takala J, Sinderby C, Brander L. Neurally adjusted ventilatory assist in patients with critical illness-associated polyneuromyopathy. *Intensive Care Med* 2011;37:1951–1961.

Copyright © 2012 by the American Thoracic Society

Autoimmunity and Chronic Obstructive Pulmonary Disease: Thinking beyond Cigarette Smoke

To the Editor:

We read with great interest the article by Churg and coworkers (1) wherein the authors have shown that a novel myeloperoxidase (MPO) inhibitor, AZ1, was able to stop progression of emphysema and small airway remodeling and to partially protect against pulmonary hypertension in an experimental model of smoke-induced emphysema. These data could be potentially extrapolated into patients with chronic obstructive pulmonary disease (COPD), since inhibition of MPO may lead to reversal of emphysematous changes through prevention of smoke-induced neutrophil infiltration and consequent production of deleterious reactive oxygen species and inflammatory mediators.

Despite the aforementioned notion implicating MPO in the pathogenesis of small airway remodeling, we would like to draw attention to the role of MPO in COPD pathogenesis from a different aspect: that of autoimmunity. The contribution of autoimmunity in COPD has been the subject of detailed investigation the past few years. Studies have shown that tobacco smoking may promote immune deregulation through modulation of death pathways of immune suppressor cells or indirectly by exposing anatomically sequestered intracellular antigens to the immune system (2). Recent data in humans revealed decreased numbers of T-regulatory cells (3) and increased titers of antinuclear antibodies in patients with COPD (4). Regarding the latter, there have been some cases in the literature describing patients with microscopic polyangiitis (MPA), a type of small vessel vasculitis characterized by circulating antineutrophil cytoplasm antibodies (ANCA) against MPO, presenting with airway obstruction and emphysema (5). The interaction of ANCA antibodies with MPO highly expressed in the cytoplasmic membrane of neutrophils that promotes degranulation of cytotoxic intracellular products, including proteases and free radicals, may explain focal alveolar epithelial and endothelial cell destruction leading to emphysema (6). While the initial chemotactic stimulus for

neutrophils to become primed and overexpress MPO in their membrane is largely unknown in patients with MPA, in patients with COPD this phenomenon is largely attributed to cigarette smoke exposure. Therefore, although intriguing, we could speculate that the beneficial effects of MPO inhibition demonstrated by Churg and coworkers (1) may be partially attributed to the abolishment of this vicious cycle, given the fact that animals were exposed to cigarette smoke for a period of time (6 mo) analogous to almost 10 years of human life according to the 48-month life expectancy of guinea pigs. Whether prolonged periods of smoking exposure leading to elevated circulating levels of MPO for extended periods of time coupled with underlying genetic predisposition may generate autoimmunity phenomena including the production of anti-MPO antibodies, both in humans and experimental models, merits further investigation.

The concept of autoimmunity and the presence of circulating autoantibodies in patients with COPD may substantiate the persistence of inflammation and its close association with lung fibrosis despite smoking cessation, indicating that this process may be initiated but not necessarily perpetuated by tobacco smoke. We therefore believe that selected patients with COPD, especially younger ones presenting with disproportionally severe disease for their smoking exposure, should be subjected to a thorough investigation of their immunologic profile, besides the assessment of α_1-antitrypsin levels. Larger studies are sorely needed to prove whether these patients constitute a novel disease phenotype that could benefit from immunomodulatory therapeutic interventions.

Author disclosures are available with the text of this letter at www.atsjournals.org.

Argyris Tzouvelekis, M.D., Ph.D.
Konstantinos Kostikas, M.D., Ph.D.
Demosthenes Bouros, M.D., Ph.D.
Medical School, Democritus University of Thrace Alexandroupolis, Greece

References

1. Churg A, Marshall CV, Sin DD, Bolton S, Zhou S, Thain K, Cadogan EB, Maltby J, Soars MG, Mallinder PR, *et al*. Late intervention with a myeloperoxidase inhibitor stops progression of experimental COPD. *Am J Respir Crit Care Med* 2012;185:34–43.
2. Agusti A, MacNee W, Donaldson K, Cosio M. Hypothesis: does COPD have an autoimmune component? *Thorax* 2003;58:832–834.
3. Isajevs S, Taivans I, Strazda G, Kopeika U, Bukovskis M, Gordjusina V, Kratovska A. Decreased FOXP3 expression in small airways of smokers with COPD. *Eur Respir J* 2009;33:61–67.
4. Bonarius HP, Brandsma CA, Kerstjens HA, Koerts JA, Kerkhof M, Nizankowska-Mogilnicka E, Roozendaal C, Postma DS, Timens W. Antinuclear autoantibodies are more prevalent in COPD in association with low body mass index but not with smoking history. *Thorax* 2011; 66:101–107.
5. Schwarz MI, Mortenson RL, Colby TV, Waldron JA, Lynch DA, Hutt MP, Cherniack RM, King TE Jr. Pulmonary capillaritis. The association with progressive irreversible airflow limitation and hyperinflation. *Am Rev Respir Dis* 1993;148:507–511.
6. Schwarz MI, Brown KK. Small vessel vasculitis of the lung. *Thorax* 2000; 55:502–510.

Copyright © 2012 by the American Thoracic Society

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

Instructions

The purpose of this form is to provide readers of your manuscript with information about your other interests that could influence how they receive and understand your work. The form is designed to be completed electronically and stored electronically. It contains programming that allows appropriate data display. Each author should submit a separate form and is responsible for the accuracy and completeness of the submitted information. The form is in four parts.

1. Identifying information.

Enter your full name. If you are NOT the corresponding author please check the box "no" and a space to enter the name of the corresponding author in the space that appears. Provide the requested manuscript information. Double-check the manuscript number and enter it.

2. The work under consideration for publication.

This section asks for information about the work that you have submitted for publication. The time frame for this reporting is that of the work itself, from the initial conception and planning to the present. The requested information is about resources that you received, either directly or indirectly (via your institution), to enable you to complete the work. Checking "No" means that you did the work without receiving any financial support from any third party -- that is, the work was supported by funds from the same institution that pays your salary and that institution did not receive third-party funds with which to pay you. If you or your institution received funds from a third party to support the work, such as a government granting agency, charitable foundation or commercial sponsor, check "Yes". The complete the appropriate boxes to indicate the type of support and whether the payment went to you, or to your institution, or both.

3. Relevant financial activities outside the submitted work.

This section asks about your financial relationships with entities in the bio-medical arena that could be perceived to influence,or that give the appearance of potentially influencing, what you wrote in the submitted work. You should disclose interactions with ANY entity that could be considered broadly relevant to the work. For example, if your article is about testing an epidermal growth factor receptor (EGFR) antagonist in lung cancer, you should report all associations with entities pursuing diagnostic or therapeutic strategies in cancer in general, not just in the area of EGFR or lung cancer.

Report all sources of revenue paid (or promised to be paid) directly to you or your institution on your behalf over the 36 months prior to submission of the work. This should include all monies from sources with relevance to the submitted work, not just monies from the entity that sponsored the research. Please note that your interactions with the work's sponsor that are outside the submitted work should also be listed here. If there is any question, it is usually better to disclose a relationship than not to do so.

For grants you have received for work outside the submitted work, you should disclose support ONLY from entities that could be perceived to be affected financially by the published work, such as drug companies, or foundations supported by entities that could be perceived to have a financial stake in the outcome. Public funding sources, such as government agencies, charitable foundations or academic institutions, need not be disclosed. For example, if a government agency sponsored a study in which you have been involved and drugs were provided by a pharmaceutical company, you need only list the pharmaceutical company.

4. Other relationships.

Use this section to report other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work.

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

Section 1. Identifying Information

1. Given Name (First Name): Demosthenes
2. Surname (Last Name): Bouros
3. Effective Date (07-August-2008): 15-January-2012

4. Are you the corresponding author? ☐ Yes ☑ No

Corresponding Author's Name: Argyris Tzouvelekis

5. Manuscript Title: Blue-201201-0028LE.R1

6. Manuscript Identifying Number (if you know it): Autoimmunity and Chronic Obstructive Pulmonary Disease: Think

Section 2. The Work Under Consideration for Publication

Did you or your institution at any time receive payment or services from a third party for any aspect of the submitted work (including but not limited to grants, data monitoring board, study design, manuscript preparation, statistical analysis, etc…)?

Complete each row by checking "No" or providing the requested information. If you have more than one relationship click the "Add" button to add a row. Excess rows can be removed by clicking the "X" button.

The Work Under Consideration for Publication

Type	No	Money Paid to You	Money to Your Institution*	Name of Entity	Comments**	
1. Grant	☑	☐	☐			×
						ADD
2. Consulting fee or honorarium	☑	☐	☐			×
						ADD
3. Support for travel to meetings for the study or other purposes	☑	☐	☐			×
						ADD
4. Fees for participation in review activities such as data monitoring boards, statistical analysis, end point committees, and the like	☑	☐	☐			×
						ADD
5. Payment for writing or reviewing the manuscript	☑	☐	☐			×
						ADD
6. Provision of writing assistance, medicines, equipment, or administrative support	☑	☐	☐			×

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

The Work Under Consideration for Publication

Type	No	Money Paid to You	Money to Your Institution*	Name of Entity	Comments**	
						ADD
7. Other	☑	☐	☐			✕
						ADD

* This means money that your institution received for your efforts on this study.
** Use this section to provide any needed explanation.

Section 3. Relevant financial activities outside the submitted work.

Place a check in the appropriate boxes in the table to indicate whether you have financial relationships (regardless of amount of compensation) with entities as described in the instructions. Use one line for each entity; add as many lines as you need by clicking the "Add +" box. You should report relationships that were present during the 36 months prior to submission.

Complete each row by checking "No" or providing the requested information. If you have more than one relationship click the "Add" button to add a row. Excess rows can be removed by clicking the "X" button.

Relevant financial activities outside the submitted work

Type of Relationship (in alphabetical order)	No	Money Paid to You	Money to Your Institution*	Entity	Comments	
1. Board membership	☑	☐	☐			✕
						ADD
2. Consultancy	☑	☐	☐			✕
						ADD
3. Employment	☑	☐	☐			✕
						ADD
4. Expert testimony	☑	☐	☐			✕
						ADD
5. Grants/grants pending	☑	☐	☐			✕
						ADD
6. Payment for lectures including service on speakers bureaus	☑	☐	☐			✕
						ADD
7. Payment for manuscript preparation	☑	☐	☐			✕

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

Relevant financial activities outside the submitted work

Type of Relationship (in alphabetical order)	No	Money Paid to You	Money to Your Institution*	Entity	Comments	
						ADD
8. Patents (planned, pending or issued)	☑	☐	☐			×
						ADD
9. Royalties	☑	☐	☐			×
						ADD
10. Payment for development of educational presentations	☑	☐	☐			×
						ADD
11. Stock/stock options	☑	☐	☐			×
						ADD
12. Travel/accommodations/ meeting expenses unrelated to activities listed**	☑	☐	☐			×
						ADD
13. Other (err on the side of full disclosure)	☑	☐	☐			×
						ADD

* This means money that your institution received for your efforts.
** For example, if you report a consultancy above there is no need to report travel related to that consultancy on this line.

Section 4. Other relationships

Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

☑ No other relationships/conditions/circumstances that present a potential conflict of interest

☐ Yes, the following relationships/conditions/circumstances are present (explain below):

At the time of manuscript acceptance, journals will ask authors to confirm and, if necessary, update their disclosure statements. On occasion, journals may ask authors to disclose further information about reported relationships.

Hide All Table Rows Checked 'No' SAVE

ICMJE Form for Disclosure of Potential Conflicts of Interest

Evaluation and Feedback

Please visit http://www.icmje.org/cgi-bin/feedback to provide feedback on your experience with completing this form.

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

Instructions

The purpose of this form is to provide readers of your manuscript with information about your other interests that could influence how they receive and understand your work. The form is designed to be completed electronically and stored electronically. It contains programming that allows appropriate data display. Each author should submit a separate form and is responsible for the accuracy and completeness of the submitted information. The form is in four parts.

1. Identifying information.

Enter your full name. If you are NOT the corresponding author please check the box "no" and a space to enter the name of the corresponding author in the space that appears. Provide the requested manuscript information. Double-check the manuscript number and enter it.

2. The work under consideration for publication.

This section asks for information about the work that you have submitted for publication. The time frame for this reporting is that of the work itself, from the initial conception and planning to the present. The requested information is about resources that you received, either directly or indirectly (via your institution), to enable you to complete the work. Checking "No" means that you did the work without receiving any financial support from any third party -- that is, the work was supported by funds from the same institution that pays your salary and that institution did not receive third-party funds with which to pay you. If you or your institution received funds from a third party to support the work, such as a government granting agency, charitable foundation or commercial sponsor, check "Yes". The complete the appropriate boxes to indicate the type of support and whether the payment went to you, or to your institution, or both.

3. Relevant financial activities outside the submitted work.

This section asks about your financial relationships with entities in the bio-medical arena that could be perceived to influence,or that give the appearance of potentially influencing, what you wrote in the submitted work. You should disclose interactions with ANY entity that could be considered broadly relevant to the work. For example, if your article is about testing an epidermal growth factor receptor (EGFR) antagonist in lung cancer, you should report all associations with entities pursuing diagnostic or therapeutic strategies in cancer in general, not just in the area of EGFR or lung cancer.

Report all sources of revenue paid (or promised to be paid) directly to you or your institution on your behalf over the 36 months prior to submission of the work. This should include all monies from sources with relevance to the submitted work, not just monies from the entity that sponsored the research. Please note that your interactions with the work's sponsor that are outside the submitted work should also be listed here. If there is any question, it is usually better to disclose a relationship than not to do so.

For grants you have received for work outside the submitted work, you should disclose support ONLY from entities that could be perceived to be affected financially by the published work, such as drug companies, or foundations supported by entities that could be perceived to have a financial stake in the outcome. Public funding sources, such as government agencies, charitable foundations or academic institutions, need not be disclosed. For example, if a government agency sponsored a study in which you have been involved and drugs were provided by a pharmaceutical company, you need only list the pharmaceutical company.

4. Other relationships.

Use this section to report other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work.

ICMJE Form for Disclosure of Potential Conflicts of Interest

Section 1. Identifying Information

1. Given Name (First Name): Konstantinos
2. Surname (Last Name): Kostikas
3. Effective Date (07-August-2008): 15-January-2012

4. Are you the corresponding author? ☐ Yes ☑ No

Corresponding Author's Name: Argyris Tzouvelekis

5. Manuscript Title: Blue-201201-0028LE.R1

6. Manuscript Identifying Number (if you know it): Autoimmunity and Chronic Obstructive Pulmonary Disease: Think

Section 2. The Work Under Consideration for Publication

Did you or your institution at any time receive payment or services from a third party for any aspect of the submitted work (including but not limited to grants, data monitoring board, study design, manuscript preparation, statistical analysis, etc…)?

Complete each row by checking "No" or providing the requested information. If you have more than one relationship click the "Add" button to add a row. Excess rows can be removed by clicking the "X" button.

The Work Under Consideration for Publication

Type	No	Money Paid to You	Money to Your Institution*	Name of Entity	Comments**	
1. Grant	☑	☐	☐			×
						ADD
2. Consulting fee or honorarium	☑	☐	☐			×
						ADD
3. Support for travel to meetings for the study or other purposes	☑	☐	☐			×
						ADD
4. Fees for participation in review activities such as data monitoring boards, statistical analysis, end point committees, and the like	☑	☐	☐			×
						ADD
5. Payment for writing or reviewing the manuscript	☑	☐	☐			×
						ADD
6. Provision of writing assistance, medicines, equipment, or administrative support	☑	☐	☐			×

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

The Work Under Consideration for Publication

Type	No	Money Paid to You	Money to Your Institution*	Name of Entity	Comments**	
						ADD
7. Other	☑	☐	☐			✕
						ADD

* This means money that your institution received for your efforts on this study.
** Use this section to provide any needed explanation.

Section 3. Relevant financial activities outside the submitted work.

Place a check in the appropriate boxes in the table to indicate whether you have financial relationships (regardless of amount of compensation) with entities as described in the instructions. Use one line for each entity; add as many lines as you need by clicking the "Add +" box. You should report relationships that were present during the 36 months prior to submission.

Complete each row by checking "No" or providing the requested information. If you have more than one relationship click the "Add" button to add a row. Excess rows can be removed by clicking the "X" button.

Relevant financial activities outside the submitted work

Type of Relationship (in alphabetical order)	No	Money Paid to You	Money to Your Institution*	Entity	Comments	
1. Board membership	☑	☐	☐			✕
						ADD
2. Consultancy	☑	☐	☐			✕
						ADD
3. Employment	☑	☐	☐			✕
						ADD
4. Expert testimony	☑	☐	☐			✕
						ADD
5. Grants/grants pending	☑	☐	☐			✕
						ADD
6. Payment for lectures including service on speakers bureaus	☑	☐	☐			✕
						ADD
7. Payment for manuscript preparation	☑	☐	☐			✕

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

Relevant financial activities outside the submitted work

Type of Relationship (in alphabetical order)	No	Money Paid to You	Money to Your Institution*	Entity	Comments	
						ADD
8. Patents (planned, pending or issued)	☑	☐	☐			×
						ADD
9. Royalties	☑	☐	☐			×
						ADD
10. Payment for development of educational presentations	☑	☐	☐			×
						ADD
11. Stock/stock options	☑	☐	☐			×
						ADD
12. Travel/accommodations/ meeting expenses unrelated to activities listed**	☑	☐	☐			×
						ADD
13. Other (err on the side of full disclosure)	☑	☐	☐			×
						ADD

* This means money that your institution received for your efforts.
** For example, if you report a consultancy above there is no need to report travel related to that consultancy on this line.

Section 4. Other relationships

Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

☑ No other relationships/conditions/circumstances that present a potential conflict of interest

☐ Yes, the following relationships/conditions/circumstances are present (explain below):

At the time of manuscript acceptance, journals will ask authors to confirm and, if necessary, update their disclosure statements. On occasion, journals may ask authors to disclose further information about reported relationships.

Hide All Table Rows Checked 'No' SAVE

ICMJE Form for Disclosure of Potential Conflicts of Interest

Evaluation and Feedback

Please visit http://www.icmje.org/cgi-bin/feedback to provide feedback on your experience with completing this form.

ICMJE Form for Disclosure of Potential Conflicts of Interest

Instructions

The purpose of this form is to provide readers of your manuscript with information about your other interests that could influence how they receive and understand your work. The form is designed to be completed electronically and stored electronically. It contains programming that allows appropriate data display. Each author should submit a separate form and is responsible for the accuracy and completeness of the submitted information. The form is in four parts.

1. Identifying information.

Enter your full name. If you are NOT the corresponding author please check the box "no" and a space to enter the name of the corresponding author in the space that appears. Provide the requested manuscript information. Double-check the manuscript number and enter it.

2. The work under consideration for publication.

This section asks for information about the work that you have submitted for publication. The time frame for this reporting is that of the work itself, from the initial conception and planning to the present. The requested information is about resources that you received, either directly or indirectly (via your institution), to enable you to complete the work. Checking "No" means that you did the work without receiving any financial support from any third party -- that is, the work was supported by funds from the same institution that pays your salary and that institution did not receive third-party funds with which to pay you. If you or your institution received funds from a third party to support the work, such as a government granting agency, charitable foundation or commercial sponsor, check "Yes". The complete the appropriate boxes to indicate the type of support and whether the payment went to you, or to your institution, or both.

3. Relevant financial activities outside the submitted work.

This section asks about your financial relationships with entities in the bio-medical arena that could be perceived to influence,or that give the appearance of potentially influencing, what you wrote in the submitted work. You should disclose interactions with ANY entity that could be considered broadly relevant to the work. For example, if your article is about testing an epidermal growth factor receptor (EGFR) antagonist in lung cancer, you should report all associations with entities pursuing diagnostic or therapeutic strategies in cancer in general, not just in the area of EGFR or lung cancer.

Report all sources of revenue paid (or promised to be paid) directly to you or your institution on your behalf over the 36 months prior to submission of the work. This should include all monies from sources with relevance to the submitted work, not just monies from the entity that sponsored the research. Please note that your interactions with the work's sponsor that are outside the submitted work should also be listed here. If there is any question, it is usually better to disclose a relationship than not to do so.

For grants you have received for work outside the submitted work, you should disclose support ONLY from entities that could be perceived to be affected financially by the published work, such as drug companies, or foundations supported by entities that could be perceived to have a financial stake in the outcome. Public funding sources, such as government agencies, charitable foundations or academic institutions, need not be disclosed. For example, if a government agency sponsored a study in which you have been involved and drugs were provided by a pharmaceutical company, you need only list the pharmaceutical company.

4. Other relationships.

Use this section to report other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work.

ICMJE Form for Disclosure of Potential Conflicts of Interest

Section 1. Identifying Information

1. Given Name (First Name): Argyris
2. Surname (Last Name): Tzouvelekis
3. Effective Date (07-August-2008): 15-January-2012

4. Are you the corresponding author? ☑ Yes ☐ No

5. Manuscript Title: Blue-201201-0028LE.R1

6. Manuscript Identifying Number (if you know it): Autoimmunity and Chronic Obstructive Pulmonary Disease: Think

Section 2. The Work Under Consideration for Publication

Did you or your institution at any time receive payment or services from a third party for any aspect of the submitted work (including but not limited to grants, data monitoring board, study design, manuscript preparation, statistical analysis, etc…)?

Complete each row by checking "No" or providing the requested information. If you have more than one relationship click the "Add" button to add a row. Excess rows can be removed by clicking the "X" button.

The Work Under Consideration for Publication

Type	No	Money Paid to You	Money to Your Institution*	Name of Entity	Comments**	
1. Grant	☑	☐	☐			×
						ADD
2. Consulting fee or honorarium	☑	☐	☐			×
						ADD
3. Support for travel to meetings for the study or other purposes	☑	☐	☐			×
						ADD
4. Fees for participation in review activities such as data monitoring boards, statistical analysis, end point committees, and the like	☑	☐	☐			×
						ADD
5. Payment for writing or reviewing the manuscript	☑	☐	☐			×
						ADD
6. Provision of writing assistance, medicines, equipment, or administrative support	☑	☐	☐			×

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

The Work Under Consideration for Publication

Type	No	Money Paid to You	Money to Your Institution*	Name of Entity	Comments**	
						ADD
7. Other	☑	☐	☐			×
						ADD

* This means money that your institution received for your efforts on this study.
** Use this section to provide any needed explanation.

Section 3. Relevant financial activities outside the submitted work.

Place a check in the appropriate boxes in the table to indicate whether you have financial relationships (regardless of amount of compensation) with entities as described in the instructions. Use one line for each entity; add as many lines as you need by clicking the "Add +" box. You should report relationships that were present during the 36 months prior to submission.

Complete each row by checking "No" or providing the requested information. If you have more than one relationship click the "Add" button to add a row. Excess rows can be removed by clicking the "X" button.

Relevant financial activities outside the submitted work

Type of Relationship (in alphabetical order)	No	Money Paid to You	Money to Your Institution*	Entity	Comments	
1. Board membership	☑	☐	☐			×
						ADD
2. Consultancy	☑	☐	☐			×
						ADD
3. Employment	☑	☐	☐			×
						ADD
4. Expert testimony	☑	☐	☐			×
						ADD
5. Grants/grants pending	☑	☐	☐			×
						ADD
6. Payment for lectures including service on speakers bureaus	☑	☐	☐			×
						ADD
7. Payment for manuscript preparation	☑	☐	☐			×

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

ICMJE Form for Disclosure of Potential Conflicts of Interest

Relevant financial activities outside the submitted work

Type of Relationship (in alphabetical order)	No	Money Paid to You	Money to Your Institution*	Entity	Comments	
						ADD
8. Patents (planned, pending or issued)	☑	☐	☐			×
						ADD
9. Royalties	☑	☐	☐			×
						ADD
10. Payment for development of educational presentations	☑	☐	☐			×
						ADD
11. Stock/stock options	☑	☐	☐			×
						ADD
12. Travel/accommodations/ meeting expenses unrelated to activities listed**	☑	☐	☐			×
						ADD
13. Other (err on the side of full disclosure)	☑	☐	☐			×
						ADD

* This means money that your institution received for your efforts.
** For example, if you report a consultancy above there is no need to report travel related to that consultancy on this line.

Section 4. Other relationships

Are there other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work?

☑ No other relationships/conditions/circumstances that present a potential conflict of interest

☐ Yes, the following relationships/conditions/circumstances are present (explain below):

At the time of manuscript acceptance, journals will ask authors to confirm and, if necessary, update their disclosure statements. On occasion, journals may ask authors to disclose further information about reported relationships.

Hide All Table Rows Checked 'No' SAVE

ICMJE Form for Disclosure of Potential Conflicts of Interest

Evaluation and Feedback

Please visit http://www.icmje.org/cgi-bin/feedback to provide feedback on your experience with completing this form.