2008 SUPPLEMENT, Clinical and Experimental Rheumatology:
"MORTALITY IN RHEUMATIC DISEASES"

To receive up to 9.0 CME credits for this activity, complete the evaluation, attestation and post-test (minimum passing grade of 70%) and return both pages to:

NYU Post-Graduate Medical School
550 First Avenue, SLH 4-20-O
New York, NY 10016

The submission deadline is December 14, 2009.

Please print clearly

Name _____ Degree _____

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Attestation:

I certify that I have completed this continuing medical education activity. The actual time I spent on this activity was _____ hours (maximum of 9.0 hours).

Signature _____ Date of completion _____

Program Evaluation

1. Were your educational needs met by this activity?
   ❏ Yes ❏ No

2. Were the educational objectives of this activity met?
   ❏ Yes ❏ Partially ❏ No

3. What was the overall instructional quality of this activity?
   ❏ Excellent ❏ Good ❏ Fair ❏ Poor

4. As a result of this activity, will you alter your patient care practice?
   ❏ Yes ❏ No

   If yes, please describe changes you plan to make:
   _____

   _____

5. Do you believe this activity was fair, balanced and free of commercial bias?
   ❏ Yes ❏ No

   If no, please state reason: _____

CME Multiple Choice Questions

Post-Test Questions
Please circle the correct answer to the following questions.

1. In patients in the 1970s, mortality rates greater than 80% within 2 years were reported for:
   a) Stage IV Hodgkin's disease
   b) Systemic sclerosis with renal involvement
   c) Polymyositis with pneumonitis
   d) Systemic lupus erythematosus with pulmonary involvement
   e) All of the above

2. All of the following are risk factors for cardiovascular disease in systemic lupus erythematosus (SLE) except:
   a) Homocysteine
   b) Renal disease
   c) F_2-isoprostanes
   d) Tumor necrosis factor alpha (TNFα)
   e) Glucocorticoids

3. Poor physical functional status is prognostic of premature mortality in which of the following diseases?
   a) Renal disease
   b) Cancer
   c) Rheumatic diseases
   d) Cardiovascular disease
   e) All of the above

4. Vital signs for chronic disease, such as physical function, global status and exercise status, are informative in patients with:
   a) Rheumatoid arthritis
   b) Systemic sclerosis
   c) Osteoarthritis
   d) Fibromyalgia
   e) All of the above

5. Lower socioeconomic status is associated with higher prevalence of all of the following diseases except:
   a) Rheumatoid arthritis
   b) Myocardial infarction
   c) Diabetes
   d) Multiple sclerosis
   e) Renal disease

6. All of the following statements concerning mortality in rheumatoid arthritis (RA) are true except:
   a) Standard mortality ratios have remained similar over 60 years.
   b) Standard mortality ratios are lower in inception cohorts than in non-inception cohorts.
   c) The cause of death that differs most between patients with RA and the general population is infection.
   d) Radiographic scores and erythrocyte sedimentation rates (ESR) are significant predictors of mortality in more than 90% of reports in which they are included.
   e) Functional status and comorbidities are significant predictors of mortality in more than 90% of reports in which they are included.

7. The following statements are true concerning mortality in psoriatic arthritis, except:
   a) Mortality rates appear to be lower at this time than in the 1970s and 1980s.
   b) Patients with mild psoriatic arthritis have higher rates of mortality than the general population.
   c) Elevated ESR is prognostic of mortality in patients with psoriatic arthritis.
   d) Radiographic damage is prognostic of mortality in patients with psoriatic arthritis.

8. Which of the following finding predicts lymphoma development in a patient with primary Sjögren's syndrome?
- *a)* Anti-Ro and anti-La antibodies
- *b)* Interstitial kidney disease
- *c)* Low C4 serum levels
- *d)* Raynaud's phenomenon
- *e)* Interstitial cystitis

9. The major cause of death in patients with SLE is:
- *a)* Opportunistic infections
- *b)* Renal failure
- *c)* Cardiovascular disease
- *d)* Antiphospholipid syndrome

10. Which one of the following statements is NOT true regarding mortality among patients with ankylosing spondylitis (AS)?
- *a)* Deaths from cancer are increased compared to the general population in patients with AS who have not undergone radiation therapy.
- *b)* Deaths related to accidents and violence are increased in patients with AS compared to the general population.
- *c)* High age is a significant risk factor for mortality.
- *d)* High erythrocyte sedimentation rate (ESR) is a significant risk factor for mortality.
- *e)* High number of inflamed joints at baseline is a significant risk factor for mortality.

11. Potential biases that may affect standardized mortality rates in studies conducted in patients with systemic sclerosis (SSc) include all except which of the following?
- *a)* Better management with better outcomes for patients managed in referral centers
- *b)* Selective recruitment of more severe cases in referral centers
- *c)* Enrollment of patients who were followed from the first time the disease was diagnosed or within 6 months at most of diagnosis
- *d)* Improved sensitization of the general healthcare referring system with referral of earlier diagnosed cases
- *e)* Losses to follow-up of patients with worse outcomes (including unrecorded deaths)

12. In patient with systemic vasculitis, which one of the following factors is NOT associated with an increased risk of mortality?
- *a)* Presence of ear, nose and throat involvement in patient with Wegener's granulomatosis
- *b)* Older age at onset in microscopic polyangiitis
- *c)* High levels of PR3-ANCA in Wegener's granulomatosis
- *d)* Presence of lung involvement at diagnosis

13. Which of the following includes factors associated with increased mortality in mixed cryoglobulinemia?
- *a)* Hepatitis C virus (HCV) infection, rheumatoid factor (RF) positivity, complement consumption
- *b)* Sicca syndrome, female sex, central nervous system involvement
- *c)* Age, renal involvement, intestinal vasculitis, widespread vasculitis and type of cryoglobulins

14. Which of the following is the most important predictor of mortality in polymyositis patients?
- *a)* Diagnosis of dermatomyositis
- *b)* Female sex
- *c)* Interstitial lung disease
- *d)* Age at onset

15. All of the following statements are true, except:
- *a)* People with hyperuricemia have increased levels of cardiovascular disease.
- *b)* Hyperuricemia is associated with insulin resistance and obesity.
- *c)* Increased mortality rates have been reported in all series of patients with gout.
- *d)* Clinical gout is associated with increased cardiovascular disease.
- *e)* Urate levels were not independently associated with the risk of cardiovascular disease in the Framingham study.

16. All of the following have been posited as explanations for the increased mortality in persons with symptomatic radiographic OA except for:
a) The presence of comorbid chronic conditions, including obesity, hypertension and type II diabetes mellitus
b) Systemic inflammation
c) Gastrointestinal and cardiovascular thrombotic side effects of nonsteroidal antiinflammatory drugs
d) Reduced physical activity secondary to pain leading to increased risk for cardiovascular events

17. In the evaluation of risk factors for premature mortality due to hip fractures, which of the following is not a confounding factor?
a) Ambulatory status
b) Mental function
c) Medical comorbidities
d) Post-operative infections
e) Age

18. Which of the below relates best to mortality in Behçet's syndrome?
a) Intercurrent infections are the main cause of mortality.
b) A longer disease duration is associated with increased mortality.
c) Gastrointestinal disease is the main cause of increased mortality.
d) Increased atherosclerosis is an important disease feature.
e) Mortality in Behçet's syndrome is appreciably increased only among the males.

Answer Sheet
Mortality in Rheumatic Diseases

1. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

2. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

3. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

4. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

5. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

6. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

7. ☐ ☐ ☐ ☐
   a   b   c   d

8. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

9. ☐ ☐ ☐ ☐
   a   b   c   d

10. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

11. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

12. ☐ ☐ ☐ ☐
   a   b   c   d

13. ☐ ☐ ☐
   a   b   c

14. ☐ ☐ ☐ ☐
   a   b   c   d

15. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

16. ☐ ☐ ☐ ☐
   a   b   c   d

17. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e

18. ☐ ☐ ☐ ☐ ☐
   a   b   c   d   e