

Amsterdam Molecular Therapeutics (AMT) Holding N.V. Proxy / Voting instruction

The undersigned:

_____, a company / private person residing at _____,
acting in his/its capacity as holder of _____ shares in Amsterdam Molecular
Therapeutics (AMT) Holding N.V., having its address at Meibergdreef 61, 1105 BA Amsterdam
Zuidoost, the Netherlands (the "Company").

Hereby grants full proxy and power of attorney to:

Each member of the Management Board of the Company / _____
to represent the undersigned, with the right of substitution, in the Annual General Meeting of
Shareholders of the Company, which will be held at the Company's offices at Meibergdreef 61, 1105
BA Amsterdam-Zuidoost, the Netherlands at 14.00 hrs on May 3, 2011 and to vote on behalf of the
undersigned in any and all matters that will be proposed to the shareholders of the Company, with all
powers which the undersigned would possess and would be able to execute if personally present at
said meeting, and to resolve on any and all matters which the proxyholder may deem necessary and
appropriate, subject to and in accordance with the instructions below.

Direction for voting on the following matters:	In favour	Against	Abstain
1. Adoption annual accounts 2010 (agenda item 2)	[]	[]	[]
2. Discharge members of the Management Board for their management in respect of the financial year 2010 (voting item) (agenda item 3)	[]	[]	[]
3. Discharge members of the Supervisory Board for their supervision of management in respect of the financial year 2010 (agenda item 4)	[]	[]	[]
4. Appointment of Auditor (agenda item 5)	[]	[]	[]
5. Delegation to the Management Board of the authority to issue shares and exclude or limit pre-emptive rights (agenda item 6)	[]	[]	[]
6. Designation of the Management Board as the company body authorized to repurchase shares (agenda item 7)	[]	[]	[]
7. Amendment of the Articles of Association to increase the authorized capital of the Company and to effect the amendment of the Articles of Association for such increase (agenda item 8)	[]	[]	[]

Signed in: _____ (Place) on: _____ 2011.

By:

Title: