

## **Clinical Practice Guidelines**

### **The Diagnosis and Management of Alpha-1 Antitrypsin Deficiency in the Adult**

*Co-chairs:* Robert A. Sandhaus, MD, PhD<sup>1</sup> and Gerard Turino, MD<sup>2</sup>

*Writing Committee:* Mark L. Brantly, MD,<sup>3</sup> Michael Campos, MD,<sup>4</sup> Carroll E. Cross, MD,<sup>5</sup> Kenneth Goodman, PhD,<sup>6</sup> D. Kyle Hogarth, MD,<sup>7</sup> Shandra L. Knight, MS,<sup>8</sup> James M. Stocks, MD,<sup>9</sup> James K. Stoller, MD, MS,<sup>10</sup> Charlie Strange, MD,<sup>11</sup> Jeffrey Teckman, MD<sup>12</sup>

#### **Online Supplement: Search Strategy and Results Summary**

The following peer-reviewed search strategy (Table I) was used to search MEDLINE with minor revisions for EMBASE, Cochrane Central Registry of Controlled Trials (CCTR) and Database of Abstracts of Reviews of Effects (DARE): (all alpha-1 antitrypsin deficiency OR familial emphysema) OR ((alpha-1 antitrypsin OR drugs) limited to treatment)).

The search for alpha-1 antitrypsin deficiency retrieved 3791 citations less duplicates for January 2002 to December 2014. Three additional hand searched articles were added. Reviewers used EndNote files for the title and abstract review. Full text articles were screened using pre-defined inclusion criteria; 34 were included in the review.

Table 1. Alpha 1-Antitrypsin Deficiency Search Strategy In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) and Ovid OLDMEDLINE<sup>a</sup>

#	Search
1	Alpha 1-Antitrypsin Deficiency/
2	((AAt or A1AT or A1-AT or A1PI or A1P1) adj deficien\$).tw.
3	AATD.tw.
4	(alpha1 or alpha 1 or alpha one or alfa1 or alfa 1 or alfa one).tw.
5	(antitrypsin\$ or anti-trypsin\$).tw.
6	(antiproteinase or antiprotease).tw.
7	(proteinase inhibit\$ or protease inhibit\$).tw.
8	5 or 6 or 7
9	deficien\$.tw.
10	4 and 8 and 9
11	2 or 3 or 10
12	1 or 11
13	(familial adj emphysema).tw.
14	pulmonary emphysema/ge
15	genetic emphysema.tw.
16	((inherit\$ or hereditary) adj3 emphysema).tw.
17	or/13-16
18	12 or 17 [all alpha 1-antitrypsin deficiency OR genetic emphysema]
19	Alpha 1-Antitrypsin/
20	(alpha1 or alpha 1 or alpha one or alfa1 or alfa 1 or alfa one).tw.
21	(antitrypsin\$ or anti-trypsin\$).tw.
22	(antiproteinase or antiprotease).tw.
23	(proteinase inhibit\$ or protease inhibit\$).tw.
24	21 or 22 or 23
25	20 and 24
26	(A1AT or hA1AT or A1-AT or A1PI or A1P1).tw.
27	19 or 21 or 25 or 26 [all alpha 1-Antitrypsin]
28	Prolastin.mp.
29	Aralast.mp.
30	Zemaira.mp.

31	28 or 29 or 30 [alpha 1-antitrypsin drugs]
32	27 or 31 [all alpha 1-Antitrypsin OR drugs]
33	limit 18 to english
34	limit 18 to abstracts
35	33 or 34
36	limit 35 to human
37	limit 35 to animal
38	35 not 36 not 37
39	36 or 38 [all alpha 1-antitrypsin deficiency OR genetic emphysema, limited to English or English abstracts, human or non-indexed]
40	limit 32 to english
41	limit 32 to abstracts
42	40 or 41
43	limit 42 to human
44	limit 42 to animal
45	42 not 43 not 44
46	43 or 45 [all alpha 1-Antitrypsin OR drugs, limited to English or English abstracts, human or non-indexed]
47	46 not 39 [alpha 1-Antitrypsin OR drugs, but NOT alpha 1-antitrypsin deficiency, limited to English or English abstracts, human or non-indexed, all years]
48	clinical trial.pt. or random.mp. or (clinical trial or clinical trials).mp. or (tu or ad or ae).fs. or th.xs. or exp Treatment Outcome/ or (treatments adj2 (effectiv\$ or efficacy)).mp. or exp cohort studies/ or exp case control studies/ or cross-sectional studies/ [treatment filter]
49	47 and 48 [alpha 1-Antitrypsin OR drugs, but NOT alpha 1-antitrypsin deficiency, limited to treatment]
50	47 not 49 [all alpha 1-Antitrypsin OR drugs that are NOT deficiency, AND NOT treatment, all years]
51	limit 50 to yr="2002-Current" [all alpha 1-Antitrypsin OR drugs that are NOT deficiency, AND NOT treatment, 2002+]
52	50 not 51 [all alpha 1-Antitrypsin OR drugs that are NOT deficiency, AND NOT treatment, before 2002]
53	39 or 49
54	limit 53 to yr="2005 -Current"

55	alpha 1-Antitrypsin Deficiency/
56	((AAAt or A1AT or A1-AT or A1PI or A1P1) adj deficien\$).tw.
57	AATD.tw.
58	(alpha1 or alpha 1 or alpha one or alfa 1 or alfa 1 or alfa one).tw.
59	(antitrypsin\$ or anti-trypsin\$).tw.
61	(proteinase inhibit\$ or protease inhibit\$).tw.
63	deficien\$.tw.
65	56 or 57 or 64
67	(familial adj emphysema).tw.
69	genetic emphysema.tw.
71	or/67-70
73	alpha 1-Antitrypsin/
75	(antitrypsin\$ or anti-trypsin\$).tw.
77	(proteinase inhibit\$ or protease inhibit\$).tw.
79	74 and 78
81	73 or 75 or 79 or 80 [all alpha 1-Antitrypsin]
83	Aralast.mp.
84	Zemaira.mp.
85	82 or 83 or 84 [alpha 1-antitrypsin drugs]
86	81 or 85 [all alpha 1-Antitrypsin OR drugs]
87	limit 72 to english
88	limit 72 to abstracts
89	87 or 88
90	limit 89 to human
91	limit 89 to animal
92	89 not 90 not 91
93	90 or 92 [all alpha 1-antitrypsin deficiency OR genetic emphysema, limited to English or English abstracts, human or non-indexed]

<sup>a</sup>Adapted for Embase, Cochrane Central Register of Controlled Trials (CCTR), Database of Abstracts of Reviews of Effects (DARE), and Cochrane Database of Systematic Reviews (CDSR) in Ovid.

**Online Supplement: Supplemental Bibliography**

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