

TABLE 41. Companies with domestic R&D paid for by others and performed by the company in health or medical, defense, and agricultural application areas, by industry and company size: 2013  
(Millions of U.S. dollars)

| Industry and company size                         | NAICS code                | Domestic R&D                       |          | Health or medical                  |         | Defense                            |          | Agriculture                        |        |
|---|---------------------------|------------------------------------|----------|------------------------------------|---------|------------------------------------|----------|------------------------------------|--------|
|   |                           | Companies <sup>a</sup><br>(number) | Amount   | Companies <sup>a</sup><br>(number) | Amount  | Companies <sup>a</sup><br>(number) | Amount   | Companies <sup>a</sup><br>(number) | Amount |
| All industries                                    | 21–23, 31–33, 42–81       | 11,514                             | 57,615   | 6,424                              | 14,143  | 6,489                              | 27,308 i | 2,705                              | 774    |
| Manufacturing industries                          | 31–33                     | 6,068                              | 40,306   | 2,750                              | 5,736   | 2,874                              | 21,961 i | 775                                | 537    |
| Food  | 311                       | 290                                | 227      | 281                                | 59      | 0                                  | 0        | 277                                | 29     |
| Chemicals   | 325                       | 569                                | 7,379    | 287                                | 4,948   | 62                                 | 74       | 121                                | 441    |
| Basic chemicals                                   | 3251                      | 130                                | 317      | 12                                 | 6 i     | 18                                 | 12 i     | 14                                 | 9 i    |
| Pharmaceuticals and medicines                     | 3254                      | 319                                | 6,534    | 271                                | 4,936   | 37                                 | 46       | 103                                | 195    |
| Other chemicals                                   | other 325                 | 120                                | 527      | 4                                  | 6       | 6                                  | 16       | 4                                  | 237    |
| Plastics and rubber products                      | 326                       | 326                                | 154 i    | 248                                | 7 i     | 275                                | 12 i     | 235                                | 4 i    |
| Nonmetallic mineral products                      | 327                       | 132                                | 26 i     | D                                  | *       | D                                  | *        | 0                                  | 0      |
| Fabricated metal products                         | 332                       | 1,282                              | 278 i    | 843                                | 22 i    | 1,000                              | 50 i     | 0                                  | 0      |
| Machinery   | 333                       | 519                                | 558      | 5                                  | 5       | 255                                | 19       | 25                                 | 39     |
| Agricultural implement                            | 33311                     | 12                                 | 36       | 0                                  | 0       | D                                  | *        | 4                                  | 30     |
| Semiconductor machinery                           | 333295                    | 19                                 | 97       | D                                  | *       | D                                  | 3        | 0                                  | 0      |
| Engine, turbine, and power transmission equipment | 3336                      | 35                                 | 113      | 0                                  | 0       | 21                                 | 8 i      | 21                                 | 9      |
| Other machinery                                   | other 333                 | 453                                | 312      | D                                  | 5       | D                                  | 8        | 0                                  | 0      |
| Computer and electronic products                  | 334                       | 966                                | 9,841    | 655                                | 369     | 755                                | 4,358    | D                                  | 19 i   |
| Semiconductor and other electronic components     | 3344                      | 465                                | 2,224    | 422                                | 208 i   | 424                                | 296 i    | D                                  | 2      |
| Other electronic products                         | other 334                 | 502                                | 7,617    | 234                                | 161     | 332                                | 4,062    | D                                  | 17 i   |
| Electrical equipment, appliances, and components  | 335                       | 243                                | 475 i    | 183                                | 18 i    | 224                                | 111 i    | D                                  | 1      |
| Transportation equipment                          | 336                       | 461                                | 20,807 i | 9                                  | 24      | 99                                 | 17,298 i | 0                                  | 0      |
| Automobiles, bodies, trailers, and parts          | 3361, 3362, 3363          | 302                                | 2,647    | D                                  | * i     | 3                                  | 7 i      | 0                                  | 0      |
| Other transportation                              | other 336                 | 159                                | 18,160 i | D                                  | 24      | 96                                 | 17,290 i | 0                                  | 0      |
| Miscellaneous manufacturing                       | 339                       | 650                                | 362      | D                                  | 284     | 196                                | 30       | 0                                  | 0      |
| Other manufacturing                               | 312–316, 321–24, 331, 337 | 631                                | 198 i    | D                                  | *       | D                                  | 9 i      | D                                  | 4      |
| Nonmanufacturing industries                       | 21–23, 42–81              | 5,446                              | 17,310   | 3,674                              | 8,406 i | 3,615                              | 5,346 i  | 1,931                              | 238 i  |
| Mining, extraction, and support activities        | 21                        | 46                                 | 395      | 0                                  | 0       | 0                                  | 0        | 0                                  | 0      |
| Utilities   | 22                        | 13                                 | 50       | D                                  | *       | 0                                  | 0        | 0                                  | 0      |
| Wholesale trade                                   | 42                        | 128                                | 18 i     | D                                  | 7       | 0                                  | 0        | 0                                  | 0      |
| Information                                       | 51                        | 321                                | 1,168    | 113                                | 28      | D                                  | 17       | D                                  | 3      |
| Publishing  | 511                       | 130                                | 1,038    | 98                                 | 14      | D                                  | 5        | D                                  | 3      |
| Telecommunications                                | 517                       | 27                                 | 4 i      | 0                                  | 0       | 0                                  | 0        | 0                                  | 0      |
| Data processing, hosting, and related services    | 518                       | 127                                | 113      | D                                  | 13      | D                                  | 12       | D                                  | 1      |
| Other information                                 | other 51                  | 37                                 | 14       | D                                  | 1       | 0                                  | 0        | 0                                  | 0      |
| Professional, scientific, and technical services  | 54                        | 4,512                              | 15,400   | 3,543                              | 8,305 i | 3,609                              | 5,306 i  | D                                  | 233 i  |
| Architectural, engineering, and related services  | 5413                      | 641                                | 1,872    | 544                                | 37 i    | 622                                | 975 i    | D                                  | 1      |
| Scientific research and development services      | 5417                      | 1,108                              | 11,363   | 968                                | 7,991 i | 773                                | 3,204 i  | 502                                | 82 i   |
| Biotechnology research and development            | 541711                    | 249                                | 3,168 i  | 234                                | 2,686 i | 129                                | 56 i     | 7                                  | 9      |
| Other scientific research and development         | other 5417                | 859                                | 8,196    | 734                                | 5,306 i | 644                                | 3,148 i  | 495                                | 73 i   |

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| Industry and company size                              | NAICS code                                     | Domestic R&D                       |          | Health or medical                  |         | Defense                            |          | Agriculture                        |        |
|--|--|------------------------------------|----------|------------------------------------|---------|------------------------------------|----------|------------------------------------|--------|
|  |  | Companies <sup>a</sup><br>(number) | Amount   | Companies <sup>a</sup><br>(number) | Amount  | Companies <sup>a</sup><br>(number) | Amount   | Companies <sup>a</sup><br>(number) | Amount |
| Other professional, scientific, and technical services | other 54                                       | 2,763                              | 2,165    | 2,032                              | 277 i   | 2,214                              | 1,126 i  | D                                  | 149 i  |
| Health care services                                   | 621-23   | 134                                | 96       | D                                  | 61      | 0                                  | 0        | 0                                  | 0      |
| Other nonmanufacturing                                 | 23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81 | 292                                | 182      | D                                  | 5       | D                                  | 23       | D                                  | 2      |
| All companies (number of domestic employees)           | -  | 11,514                             | 57,615   | 6,424                              | 14,143  | 6,489                              | 27,308 i | 2,705                              | 774    |
| Small companies <sup>b</sup>                           |  |                                    |          |                                    |         |                                    |          |                                    |        |
| 5-499  | -  | 11,083                             | 10,897   | 6,282                              | 3,388   | 6,349                              | 3,652 i  | 2,643                              | 171 i  |
| 5-99   | -  | 10,034                             | 6,262 i  | 5,778                              | 2,257 i | 5,850                              | 1,929 i  | 2,467                              | 102 i  |
| 5-49   | -  | 8,792                              | 4,513 i  | 5,016                              | 1,817 i | 5,112                              | 1,370 i  | 2,183                              | 65 i   |
| 5-9  | -  | 3,350                              | 1,207 i  | 1,886                              | 403 i   | 1,873                              | 524 i    | 828                                | 22 i   |
| 10-24  | -  | 3,761                              | 1,605 i  | 2,325                              | 475 i   | 2,245                              | 482 i    | 1,186                              | 28 i   |
| 25-49  | -  | 1,681                              | 1,700    | 805                                | 939     | 995                                | 365 i    | 169                                | 15 i   |
| 50-99  | -  | 1,242                              | 1,749    | 761                                | 440 i   | 738                                | 559 i    | 284                                | 37 i   |
| 100-249  | -  | 800                                | 2,743    | 400                                | 621     | 408                                | 1,079    | 144                                | 48 i   |
| 250-499  | -  | 249                                | 1,892    | 105                                | 510     | 92                                 | 644 i    | 32                                 | 20 i   |
| Medium and large companies                             |  |                                    |          |                                    |         |                                    |          |                                    |        |
| 500-999  | -  | 130                                | 1,722    | 42                                 | 528     | 39                                 | 371 i    | 16                                 | 26     |
| 1,000-4,999  | -  | 160                                | 10,175   | 56                                 | 4,710 i | 55                                 | 1,137    | 28                                 | 236    |
| 5,000-9,999  | -  | 47                                 | 6,505    | 13                                 | 3,938   | 13                                 | 1,186 i  | 6                                  | 62 i   |
| 10,000-24,999  | -  | 58                                 | 6,942    | 19                                 | 1,252   | 17                                 | 3,045    | 6                                  | 210    |
| 25,000 or more   | -  | 37                                 | 21,374 i | 12                                 | 327 i   | 16                                 | 17,917 i | 7                                  | 69     |

\* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

<sup>a</sup> Statistics for number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

<sup>b</sup> Upper bound based on U.S. Small Business Administration's definition of a small business; Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding; for number of companies detail may not add to total because of rounding and because some companies requested multiple survey questionnaires to facilitate sub-company reporting (see technical notes and appendix table A-8). Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D. Some R&D may be reported in more than one application area. Some R&D is not classified in any application area.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2013.