

Cambridge University Press

978-0-521-56123-5 - The Story of Taxol: Nature and Politics in the Pursuit of an Anti-Cancer Drug

Jordan Goodman and Vivien Walsh

Index

[More information](#)

Index

- actor–network theory, 5–6
 Advanced Molecular Technologies, 141, 142, 162–4, 207–8
 American Cancer Society, 13, 15
 Annual Pacific Yew Program, 168–9
 anti-cancer drugs, 19
 antimetabolic compounds, 90–1
- B16 screen, 70, 79; taxol tested against, 70
 Barclay, Arthur, 29, 50, 51, 53, 54, 86–7, 88
 Bean, Michael, 210–12
 biography, 5
 Boettner, Fred, 81–2, 89, 97, 98–9, 104
 Bolsinger, Chuck, 126
 Bristol-Myers, 132–3, 138–9, 158–61, 163, 164, 165–72; *see also* Bristol-Myers Squibb
 Bristol-Myers Squibb, 204–9, 235, 237–8; and history of taxol, 4; and sales of taxol, 3
 Bureau of Land Management, 59, 86, 129; *see also* *Taxus brevifolia*
- Camptotheca acuminata*, 24, 50, 54, 56
 cancer: chemical agents used against, 10, 11; and metaphors, 14; public awareness of, 13
 cancer chemotherapy, 13; and basic science, 14; beginnings of, 9–10; at the National Cancer Institute, 15–19; mice used experimentally in, 17; research status of, 13, 14, 15; screening compounds for, 12, 17, 19, 26
 Cancer Chemotherapy National Service Center (CCNSC), 17, 25, 26, 27
 Chabner, Bruce, 137, 161–2, 181, 197–8
 clear-cutting, 60, 89
 Cliff, Edward, 64
 clinical trials: definition of, 113–14
- colchicine, 21, 90–1
 Connolly, Patrick, 122–6, 128, 142, 204, 206, 208–9
 Cooperative Research and Development Agreement (CRADA), 140, 141, 144, 157–69, 205–6
 Corporation Biolyse Pharmacopée Internationale, 171–2
 cortisone, 10, 23
 Cragg, Gordon, 117, 119, 120, 121, 125–6, 127, 128, 129–31, 134, 137, 142, 200–1
- 10-deacetylbaccatin, 100–1
 Destito, John, 141–5, 162–5, 202–8, 221
 Douros, John, 32, 70, 71, 80, 99
 Duke, James, 33, 97–8
 Dupont, 163
- Edson, Chuck, 83–4
 Ehrheart, Floyd, 206, 208, 209–10
 Eli Lilly and Co., 163
 Eller, Bobby Ray, 123–4, 125
 Engle, Robert, 69, 70
 enrolment, 6
 environmental consciousness, 88–9
 Environmental Defense Fund, 210–14
 Environmental Impact Statement, 236
 environmental legislation, 88
 environmental politics, 88–9
 Erlanson, Carl, 23, 25
 ESCAgenetics, 176
- Federal Technology Transfer Act of 1986, 140
 folk medicine, 22
 Forest Service, 59, 60, 128; *see also* *Taxus brevifolia*
 Forest Summit, 196
 fractionation, 31, 54, 55

Cambridge University Press

978-0-521-56123-5 - The Story of Taxol: Nature and Politics in the Pursuit of an Anti-Cancer Drug

Jordan Goodman and Vivien Walsh

Index

[More information](#)

Index

281

- Franklin, Jerry, 102–3, 145
Fuchs, David, 91–2
- Gentry, Howard Scott, 50
Gifford Pinchot National Forest, 51, 60
Greene, Andrew, 101, 134–5, 136, 179
- Hartwell, Jonathan, 20, 21, 22, 23, 24, 25, 28, 32, 50, 51, 53–5, 62, 71, 93
Hartzell, Hal, 87, 104–5, 224
Hassrick, Phil, 223, 236–7
Hauser Chemical Research, 131–2, 164, 204–10, 237
Hauser Northwest, 229–31
Hoedads, 84, 87
Holmes, Frankie Ann, 200
Holton, Bob, 102, 121, 135, 137, 166, 177, 178–9, 238
Horovitz, Zola, 197, 235
Horwitz, Susan, 90, 91, 92–3, 94, 128, 212
- Johns Hopkins Oncology Center, 114, 119, 127, 134, 144
Johnson, Randall, 91–2
Jones, Quentin, 24, 25
- KB cell culture screen, 31, 32
Kefauver–Harris amendments, 28, 114
Kingston, David, 102, 135
Kupchan, Morris, 91
- L1210 screen, 79
Lasker, Mary, 13, 15
linear array, 79–80
Lyphomed, 132
- McGuire, William, 121, 127, 144, 212
Manheim, Bruce, 210–12, 227–8
maximum tolerated dose (MTD), 114
maytansine, 91
Memorial Hospital, 11, 12
microtubules, 90; and cell division, 90;
see also antimetabolic compounds
Monsanto Research Corporation, 70, 81
Montana State University, 176
Montieth, James, 224–5
Murphy, James, 10
- National Cancer Institute (NCI): and
pharmaceutical companies, 132–3, 140,
159; research budget of, 13
National Forest System, 59
Native Yew Conservation Council,
217–24
New Forestry, 103
- Nicolaou, K.C., 177, 179–80
nitrogen mustards, 11, 46
Norse, Elliott, 211–12
northern spotted owl, 145–6, 195–6
nude mice, 94–5
- obligatory points of passage, 6
old-growth forests, 60, 102–3, 145, 195–6
Oregon Natural Resources Council,
224–7
- P388 screen, 31, 32–3, 79
Pacific Yew Act, 196–9, 227–9
paclitaxel, 170
Perdue, Robert, 25, 29, 30, 32, 33, 55, 58,
59, 60, 61–5, 82, 83, 85, 86, 93
Phase I clinical trial, 114
Phase II clinical trial, 114
Phyton Catalytic, 176
Pilz, David, 236
plant extracts, 30
plants: biological activity of, 22; chemical
agents from, 20, 21; methods of
procuring for medical research, 28–30
podophyllotoxin, 21, 22, 23, 90, 91
Polysciences, 81, 131
Potier, Pierre, 100, 134–5, 136, 179
primary metabolites, 19
- Rhoads, Cornelius Packard, 10–11, 12, 15,
17
Rhône-Poulenc, 100, 133, 158, 164, 165–6
Rockefeller Institute, 10
Rust, Jerry, 84, 87, 104–5, 120, 216–19,
222–3, 224, 237
- Sarcoma 180 mouse tumour, 12, 17, 31
Save the Yew Foundation, 84, 87
Scher, Stan, 218, 221–2
Schering-Plough, 133
Schwarzschild, Shimon, 223
secondary metabolites, 19–20
Shear, Murray, 12, 13, 20–1
Sloan–Kettering Institute, 10, 11, 12, 13,
15
Snader, Ken, 216
Spies, Tom, 234
Spjut, Richard, 83, 84
Strobel, Gary, 170–1
Studds, Gerry, 227
Suffness, Matthew, 32, 79, 80, 81, 82, 85,
98, 99, 121, 128, 130–1, 132, 133, 138,
139, 141, 142, 162
Swindell, Charles, 135

Cambridge University Press

978-0-521-56123-5 - The Story of Taxol: Nature and Politics in the Pursuit of an Anti-Cancer Drug

Jordan Goodman and Vivien Walsh

Index

[More information](#)

282

Index

- taxol: and breast cancer, 199–201; discovery of antimitotic properties, 92; first isolation of, 55–6; first large-scale manufacture of, 81–2; formulation problems of, 96–7; importance to cell biology of, 93–4; INDA filed and approved for, 104; molecular formula of, 57; naming of, 56; NDA filed for, 167; in needles of *Taxus brevifolia*, 65, 97–8; and ovarian cancer, 127, 134; Phase I clinical trials of, 114–15; Phase II clinical trials of, 116, 118–19, 127; Phase II clinical trials on melanoma, 119; Phase II clinical trials on ovarian cancer, 119; Phase II clinical trials on renal cancer, 119; public awareness of, 120–1; raw material alternatives for, 172–6; semi-synthetic process approved for, 238; semi-synthesis of, 100–1, 102, 134–7, 178; structural formula of, 56–7; tissue culture in manufacture of, 176; total synthesis of, 102, 135, 176–82; toxicology studies of, 99; trademarking of, 169–72; unique biological properties of, 92–3; yield of, 117, 131; *see also Taxus brevifolia*
- taxol and *Taxus* workshop, 215–16
- Taxol Working Group at the National Cancer Institute, 132, 134, 138, 139
- Taxus*: bioactivity of species, 63–4; description of species, 51; selection and breeding, 66; wild and cultivated species, 63
- Taxus baccata*, 53, 100, 102
- Taxus brevifolia*: alternatives to bark, 221–2; changing identity of, 198–9; environmental concerns for, 84, 88; estimate of numbers of, 126, 214, 233–4; first collection of samples of, 51; scarcity of, 31–2; scientific knowledge of, 51, 68, 83, 122, 128, 234–5; harvesting of and employment, 230–1; thefts of bark of, 229; as threatened species, 210–14; use of needles of, 172–5; *see also taxol*
- Toray Industries, 163
- translation, 6
- Unimed, 132, 158, 164
- United States Department of Agriculture (USDA): function of, 23; and plant exploration, 26, 29
- University of Arizona, 24–5, 26
- University of Mississippi, 174–5, 216
- Upjohn, 132, 162, 164
- vinca alkaloids, 27–8
- Walker 256 rat tumour screen, 31
- Wall, Monroe, 24, 31, 49, 50, 54–7, 60, 61, 63, 64, 65, 67–70, 82
- Warner, Robert, 98, 116–17
- Wender, Paul, 102, 135, 177–8, 180–1
- Weyerhaeuser, 128–30, 133, 134, 138, 141–2, 162, 163, 226
- Wheeler, Nicholas, 129
- Wisconsin Alumni Research Foundation (WARF), 30, 50, 53
- Wittes, Robert, 133, 160
- Wood, Wendell, 225–6
- Wyden, Ron, 159, 227, 235
- Xechem, 158, 164–5
- xenograft tumours, 94, 95–6