Art imitates life, we are often told, but occasionally, we also observe that life imitates art. Hollywood movies may fulfill the definition of art in both of these adages. Movies evoke our fantasies, fears, loves, and hates, and therefore they reflect our lives. However, the necessities of good storytelling — dramatization, plots, character development, romanticism — often dictate that film concepts diverge from reality. Thus, films often are imperfect reflections of our lives. As F. Scott Fitzgerald said, “There are no second acts in American lives.”

Movies have been blamed for creating disturbed or profane cultural images that lead to societal ills such as violence, sexual deviancy, and isolation. Whether art imitates life, or vice versa, it may be instructive to study how movies depict medical themes, and especially oncology, in order to understand how cancer and medicine are perceived in popular culture.

Medical themes have always been popular in movies; one author claims that Hollywood studios released more than 100 films with medical or surgical themes in the 1930s and 1940s. How films portray medical themes may tell us a great deal about how we perceive our medical care and our mortality. In the end, movies are written, produced, and directed by people who often use their own experiences as creative inspiration. As those experiences change, so do films.

The purpose of this paper is to review the American films of the 20th century that have depicted themes related to cancer, to analyze the manner in which patients, physicians, and oncology are portrayed, and to relate those portrayals to the realities of oncology and American medicine at the time of the films' release. If art imitates life, we would expect movies with cancer themes to reflect contemporaneous perceptions, oncology practice, and public policy. If, on the other hand, art does not imitate life — for example, if the necessities of fiction and storytelling force film depictions to deviate from reality — we would expect films with cancer themes to be divorced from oncology practice and policy. If the truth is somewhere in between the two extremes, the analysis will demonstrate mixed findings. From this analysis, we may better understand the perceptions surrounding cancer and its medical care.

I have been an avid moviegoer for almost 50 years and a physician involved in the care of cancer patients for more than 25 years. I am always fascinated with the way medical themes and technology have been presented in film. There is no question that this paper is subjective and influenced by my own experiences. However, in an attempt to make this study more objective, I used the Internet Movie Database (IMDb) to supplement my own movie experiences. The IMDb contains detailed information on more than 180,000 films that are searchable by title, actor, director, theme, dialogue, quotes, and topics. I searched the IMDb for films with medical and oncology themes using specific search terms (eg, cancer, tumor, malignancy, hospital, illness, sickness, doctor, physician, medicine, medical). I also reviewed previously published literature about movies with medical themes. I found no prior reports about films with oncology themes.

My review is limited to American feature films made for theatrical release. I excluded documentaries, shorts films, pornographic films, movies made for television, and movies with psychologic or psychiatric themes. Of more than 150 films released between 1930 and 1999 with medical themes, only 20 had topics that related to cancer (Table). I then viewed each of these films to see them in current context and related them to contemporaneous oncology policy and practice.

<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Cancer Theme</th>
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<tbody>
<tr>
<td>1939</td>
<td>Dark Victory</td>
<td>brain tumor</td>
</tr>
<tr>
<td>1948</td>
<td>An Act of Murder</td>
<td>brain tumor</td>
</tr>
<tr>
<td>1950</td>
<td>Crisis</td>
<td>brain tumor</td>
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<tr>
<td>1958</td>
<td>Cat on a Hot Tin Roof</td>
<td>terminal cancer</td>
</tr>
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<td>1970</td>
<td>Love Story</td>
<td>leukemia</td>
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<td>1973</td>
<td>Bang the Drum Slowly</td>
<td>lymphoma</td>
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<tr>
<td>1979</td>
<td>Promises in the Dark</td>
<td>osteogenic sarcoma</td>
</tr>
<tr>
<td>1983</td>
<td>Terms of Endearment</td>
<td>lymphoma</td>
</tr>
<tr>
<td>1983</td>
<td>Silkwood</td>
<td>environmental leukemia</td>
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<tr>
<td>1985</td>
<td>American Flyer</td>
<td>leukemia</td>
</tr>
<tr>
<td>1991</td>
<td>The Doctor</td>
<td>laryngeal cancer</td>
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</tbody>
</table>
The Table shows that the types of cancer portrayed in film do not represent the distribution of cancer types seen in real life. Leukemia and lymphoma were portrayed in 9 of the 20 films, brain tumors in 4, and unspecified terminal cancer in 3. Renal, laryngeal, bone, and breast cancers were each depicted once. Similarly, the age distribution of cancer victims in these films does not reflect reality. Over half of the film cancer patients are under 30 years of age, and 75% are under 40. In order for films to continue to depict “clean” cancers, in young, attractive subjects, leukemia/lymphoma has become the modern movie cancer.

Although movies with medical themes have been common since the 1930s, films with oncology themes were rare until 1970 and have become more prevalent in the 1990s. This trend may be the result of changes in demographics, in the film industry, in movie audiences, and in interest in medical topics.

1930 - 1955

From 1930 to 1955, movies were popular adult entertainment. The Great Depression and World War II (WWII) had reduced the American birth rate; the older-aged movie-goers led creators of popular culture to target their product to adults rather than teenagers and children. Even farcical comedies with medical themes (such as *A Day at the Races* [1937] with the Marx Brothers or *Dizzy Doctors* [1937] with the Three Stooges) were adult fare, often shown in double features with more standard dramas. Preceding the mass dissemination of television, adults and families frequented neighborhood movie theaters for inexpensive entertainment. For example, the ticket price for *Gone With the Wind* [1939] was 25 cents. Prior to 1955, audiences were largely composed of adults, and Hollywood movies accordingly presented adult themes, including medical themes. Art imitates life, we are often told, but occasionally, we also observe that life imitates art. Hollywood movies may fulfill the definition of art in both of these adages. Movies evoke our fantasies, fears, loves, and hates, and therefore they reflect our lives. However, the necessities of good storytelling — dramatization, plots, character development, romanticism — often dictate that film concepts diverge from reality. Thus, films often are imperfect reflections of our lives. As F. Scott Fitzgerald said, “There are no second acts in American lives.”

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Complaints about the inaccuracy of motion pictures are not new. Many films made in the 1920s and early 1930s were considered too graphic, violent, or sexually suggestive. Medical situations, however, offered filmmakers the opportunity to display exposed bodies, and exposed female bodies sold tickets. The Motion Picture Production Code (MPPC) was adopted in 1930 to set decency standards for film. This voluntary code, self-imposed by Hollywood moviemakers to avoid governmental censorship legislation,
severely limited the graphic presentation of medical themes as well as discussion of certain areas of anatomy, such as breasts. The code included “do not” 11 times and “be careful” 26 times; it also prohibited topics such as “sex hygiene and venereal diseases, scenes of actual childbirth — in fact or in silhouette — and children’s sex organs.” Surgical operations were explicitly identified as a “be careful” area in the code, and they were listed as a “repellent subject” along with hangings, cruelty to children, and sale of women.  

The most popular movies with medical themes before WWII were historical or biographical, such as Arrowsmith [1931] concerning conquering the plague, The Story of Louis Pasteur [1936] about the French microbiologist, and Yellow Jack [1938] about curing yellow fever, or they were based on classical literary themes, such as Camille [1937] and Weimar Hights [1939]. Cancer, a dreaded and lethal disease at that time, was an infrequent movie subject. The common use of happy endings in films made before WWII also limited the use of cancer as a film topic. Between 1930 and 1955, only three films depicted cancer themes (Dark Victory [1939], An Act of Murder [1948], and Crisis [1950]), and all three concerned patients with brain tumors. That all three movies portrayed brain tumors during this period was probably not accidental. Brain tumor represented a “safe” cancer topic, consistent with the MPCC. It was a “clean” cancer since it did not involve sexual organs, messy gastrointestinal or genitourinary systems, surgical drains, or unattractive disfigurement by surgery, radiation, or disease, and its discussion did not require using medical or anatomical language considered controversial at the time. Instead, the brain could be safely discussed as the seat of knowledge, memory, and coordination of the rest of the body. Moreover, brain surgery itself is described in Dark Victory as “courageous” and “heroic.” A similar discussion of colon cancer surgery would have been unthinkable.

In Dark Victory, the postoperative heroine (played by Bette Davis) has to wear a small cap, coordinated to her fashionable wardrobe, as evidence of her cancer surgery. Postoperative thoracic or abdominal surgery would have been less attractive or acceptable cinematically.

1956 - 1969

After 1955, American demographics and movie audiences changed and so did Hollywood movie themes. The birth rate after WWII soared, bringing “baby boom” youth to movie theaters by the late 1950s and 1960s. Moreover, with the availability of television, older adults began to stay home for entertainment rather than go to movie theaters. As a result, movie themes, including those with medical topics, were more youth oriented from 1956 to 1969. The proportion of films released with medical themes decreased, and films with cancer topics remained rare. Romantic comedies were in vogue (Tammy and the Doctor [1963]) as were movies about romantic young physicians in training (The Interns [1962] and The New Interns [1964]). Romance between doctors and their patients has always been common fare for Hollywood films, despite the ethical problems surrounding such relationships. For example, the heroine and the neurosurgeon in Dark Victory fall in love and marry after her surgery.

American films evolved dramatically in the late 1960s to target a younger audience, but those movies were unsuccessful at the box office. The audience that they tried to reach did not perceive the youth-oriented films produced by Hollywood studios as relevant. Simultaneously, television provided a medium and experience for young, creative writers, actors, and directors who could not get opportunities in Hollywood. Steven Spielberg, for example, began his career as a director in episodic television. Television dramas in the 1950s and 1960s portrayed themes and realism in dramas not often seen in movies of that time. The Hollywood studios for the first time were in financial trouble and were receptive to offering young directors creative freedom and control. These new filmmakers responded by making movies that broke cultural and cinematic molds. They discarded the standards of the MPCC, cared little for the newer Motion Picture Association of America rating system (G, GP, R, X), and dared to portray themes and topics previously considered taboo.

Films such as Bonnie and Clyde [1967], Midnight Cowboy [1969], and Taxi Driver [1976] portrayed violence, sex, and urban life as never before. Midnight Cowboy was the first mainstream film willing to carry an X rating at its release, and it was among the first to graphically portray urban street life. It was also the first film, and still one of the only films, to portray the realism of illness for the poor and destitute. Film patients are almost universally affluent or at least able to afford medical care. Dustin Hoffman’s character, Rato Rizzo, has tuberculosis but does not have the money for medical care, food, or clean shelter. When his friend suggests he get medical care at an indigent care facility, he movingly describes not only the shame and lack of dignity he felt being treated there, but also his fear of being an experimental subject without control of his situation.

1970s

Films with medical themes in the 1970s were revolutionary. In an era of civil protests against the Vietnam war, the “black comedy” M*A*S*H [1970] projected an antiwar sentiment, albeit in Korea instead of Vietnam. This film turned the traditional depiction of physicians and nurses upside-down, portraying them as bawdy, sexual, and anti-authoritarian. Their reaction to the death and destruction of the Korean War was irreverently portrayed via alcohol drinking and absurd comedy. Another “black comedy,” The Hospital [1970], depicted a large, urban, teaching hospital as a place of danger, iatrogenic disease, confusion, and political strife. Coma [1978], which was based on the novel by Robin Cook, MD, presented a woman medical student as a heroine and portrayed medical research and segments of the medical establishment as sinister.

New depictions of cancer themes were not necessarily included in this new wave of filmmaking. For example, Love Story [1970] was a traditional and successful Hollywood film, as well as one of the most popular romance films ever produced. An attractive, young couple, played by Ryan O’Neal and Ali McGraw, meet at Harvard and marry, despite differences in social and financial standings and against the wishes of his wealthy father. As recently reported, Vice President of the United States Al Gore claims that Erich Segal, the author of the novel and screenplay, used Mr Gore and wife Tipper as the models for the upbeat “preppie” and his free-spirited girlfriend.

Unfortunately, the young woman in the film develops leukemia and dies, leaving the young husband with only his memories and love for his late wife. The film is notable for its scene in the physician’s office, where the husband is told that his wife will soon die, but the disease is not identified, and the husband does not ask for a diagnosis or other details. The husband and the physician then decide to keep the information from the wife/patient for as long as possible to protect her from the bad news. Eventually, she becomes aware of her condition when she is referred to a hematologist for treatment. We can infer her diagnosis of leukemia from the on-screen discussions among film physicians, but it is never explicitly stated. She is treated briefly in the hospital and is never discharged before her death. Her death in the hospital is not portrayed on film; rather we see her husband comfort her in bed prior to her death and see him exit the hospital room after her demise. Despite the religious and class differences driving the plot details. The husband and the physician then decide to keep the information from the wife/patient for as long as possible to protect her from the bad news. Eventually, she becomes aware of her condition when she is referred to a hematologist for treatment. We can infer her diagnosis of leukemia from the on-screen discussions among film physicians, but it is never explicitly stated. She is treated briefly in the hospital and is never discharged before her death. Her death in the hospital is not portrayed on film; rather we see her husband comfort her in bed prior to her death and see him exit the hospital room after her demise. Despite the religious and class differences driving the plot.
disappeared until Coma was produced in 1978. Second, in the film, she searches a national database (available in real life due to the National Cancer Act of 1971) to find experts and investigational therapies for her patient, a 17-year-old girl with osteogenic sarcoma. Third, the diagnosis, prognosis, and treatment options are clearly stated in the film and discussed with the patient and her parents. For the first time, how we practice in real life was more closely portrayed in film. Fourth, several issues related to death are more fully explored in this film than in previous releases.

Almost certainly, the differences in the depictions of film deaths between Love Story in 1970 and Promises in the Dark in 1979 are related to the publication of On Death and Dying in 1969 by Elisabeth Kubler-Ross, MD. Her groundbreaking work was accessible to both popular and medical audiences. By 1979, her work was so well known that Ladies Home Journal honored her with a Woman of the Decade Award after having named her Woman of the Year in Science and Research in 1977.

In Promises in the Dark, a teenage girl’s slowly deteriorating condition during the progression of her disease and her development of lung metastases are presented realistically, as are her frequent treatments and care at home and in the hospital. The girl does not want to be placed on life support systems when near death, and she discusses her thoughts and wishes with her physician but not with her parents. When the girl has respiratory distress near death, her home health nurse calls an ambulance that takes the patient to a hospital emergency room. She is subsequently placed on intubation and mechanical ventilation in a terminal coma. The physician tries to convince the parents to discontinue the life support systems, saying that the prognosis is terminal and that the girl did not want to be placed on mechanical ventilation. However, when the parents decide not to terminate support, the physician herself stops support and permits death to occur. The quiet death, under these circumstances, is the first death related to cancer on film.

This was not necessarily the first time that the subject of assisted death had been portrayed in film. In An Act of Murder [1948], a judge considers killing his wife who has a terminal brain tumor in order to ease her suffering. In Crisis [1950], a ruthless foreign political dictator with a terminal brain tumor wants to end his life, and he asks a vacationing American neurosurgeon to help him. The ethical crisis for the physician is whether to do the societal good deed of ridding the country of the tyrant or to follow the Hippocratic oath and refuse to assist death. Twenty-nine years later, in Promises in the Dark, the physician chooses to follow the wishes of her patient, despite the directives and legal rights of the parents of the 17-year-old minor.

1980s

Three films with cancer themes were released in the 1980s. The first of these, Terms of Endearment [1983], was successful critically and financially. Shirley MacLaine played a neurotic but loving mother who offers advice and comfort to her daughter, played by Debra Winger, through the daughter’s troubled marriage to an unfailthful college professor. The daughter, mother herself to three young children, develops an enlarged axillary lymph node, subsequently found to be a “malignancy.” We can only infer that it is lymphoma. The daughter’s treatment begins as an outpatient, then continues in the hospital. The film includes a realistic scene of a discussion between the daughter and her physician about her tumor’s lack of response to chemotherapy and her worsening prognosis. Her condition deteriorates, and she eventually dies quietly, on screen, in the hospital. The mother and husband are in the room at the time of death, although the husband is asleep.

The film is notable for an emotional scene in which the mother first pleads, then angrily demands, that nurses give her daughter pain medication that had been withheld according to a time schedule. I believe this to be the first time that cancer pain management, including the reluctance to give narcotics as needed, was an issue portrayed on film. This film issue corresponds to our growing real-life awareness of the clinical challenge to relieve cancer pain adequately.

Silkwood [1983] was based on the true story of Karen Silkwood, a corporate whistleblower at the Kerr-McGee nuclear facility in Oklahoma. She alleged improper occupational handling of radioactive plutonium and disappeared en route to present evidence to federal investigators. An increased rate of cancers, especially leukemias, found among workers at the plant led to suspicions about occupational exposures. A related film, A Civil Action [1999], was also based on a true story involving an excessive number of cancers, especially leukemias, that developed in Woburn, Mass., due to industrial leakage of toxic wastes into the water supply. The film portrays the story of the lawyer who was hired by eight families whose children died of leukemia. He discovers the true cause of the toxic exposure and recovers damages in court. Both Silkwood and A Civil Action used the true events of exposure-induced cancers as a vehicle to dramatize the subsequent heroes of the characters who uncover the corporate villains.

Environmental illness is a relatively recent phenomenon in film, probably beginning with Silkwood, although there are references to coal miners’ pneumoconiosis in The Citadel [1938] and Coal Miner’s Daughter [1980]. Other recent examples are With Honors [1994], in which a character suffers and dies of pulmonary asbestosis, and Safe [1995], in which a woman develops a generalized hypersensitivity to multiple household exposures, products, solvents, and aerosols.

The concept of cancer as a result of pollution or toxic exposure is popular because it suggests effective treatments other than standard medical or surgical approaches. Cancer patients are attracted to alternative therapies that reflect emphasis on personal responsibility, nutrition, pollution, and purification; these issues have moral and religious overtones.

1990s

At least 50 films with medical themes were released in the 1990s. Of the 20 films with cancer themes in the last 70 years, 10 reached theaters in this last decade. The marked increase in medical and cancer movies in the 1990s is probably due to two related factors. First, the leading edge of the “baby boom” generation, which defined much of the audience for Hollywood films for the last four decades, reached 44 years of age in 1990. Films about adults with illnesses were now relevant to this generation. Second, and perhaps related to this demographic aging factor, health care costs became a significant economic and political issue in the late 1980s. “Health care reform” became a publicly debated issue as well as a legislative priority for newly elected President William Clinton in 1992. Probably in response to this growing awareness of health care issues, films with medical themes poured out of Hollywood from 1990 to 1995.

The Doctor [1991] is an outstanding film that should be seen by all physicians and medical students. It is often overlooked by viewers since at least two other medical movies (Regarding Henry and Doc Hollywood, released in the same year), were more successful at the box office. In The Doctor, a superb and arrogant cardiac surgeon, played by William Hurt, develops laryngeal carcinoma. As a patient, he is now forced to see hospitals, physicians, and oncology from a patient’s perspective, which at times presents a cold-blooded, bureaucratic, and frustrating image. The engaging film is based on the true experiences of Edward E. Rosenbaum, MD, who wrote A Taste of My Own Medicine and was a co-author of the screenplay.

The film is full of scenes we know all too well from real oncology life: (1) encountering the clinical oscillation and fragmentation that multidisciplinary care can engender, (2) answering the same registration information at each clinical visit, (3) waiting long beyond scheduled appointment times to receive treatment or talk to a physician, (4) hearing the commonly heard comments, fears, and frustrations of patients as they sit in waiting rooms and compare stories. The scene of his diagnosis is particularly believable. A technically competent, efficient otolaryngologist performs a video-assisted laryngoscopy, and she coldly informs him he has cancer. As she continues her recitation of the facts, he recoils at the diagnosis and cannot assimilate her information. We infer that he is shocked and needs support, yet he feels condensation from the otolaryngologist. Scenes with Elizabeth Perkins, playing a fellow cancer patient who teaches him the ways of the medical system, are touching and real. In the end, his cancer is apparently cured, and he initiates an educational program for medical students to instill empathy and humanism, letting them experience directly the humiliations and frustrations of our modern medical complexes.

Movies with cancer themes are often overly sentimental. For example, in Dying Young [1991], Julia Roberts plays an aimless young woman who takes a job as a nurse/companion to a rich, 28-year-old art history graduate student with leukemia. They fall in love, but he decides to decline treatment and live out his remaining life with her in the idyllic setting of coastal northern California. The film graphically portrays side effects of chemotherapy, which the patient refers to as “poison” (eg, hair loss, severe vomiting, appetite loss, lethargy), and he stops treatment. The ending is unsatisfying, both romantically and medically: they separate, and his prognosis and outcome are undefined. Films released later in the decade (One True Thing [1998] and Stepmom [1999]) portray chemotherapy more benignly.

Chemotherapy-related side effects are often perceived as more deleterious to quality of life by people without cancer than by cancer patients.14 Moviemakers and audiences without direct experience may be influenced by such perceptions. Clinical advances in the management of nausea and vomiting induced by chemotherapy have occurred in the last 15 years. For example, one study showed that between 1983 and 1993, there was a reduction in the severity of symptoms experienced while receiving chemotherapy and a shift in patient concerns from physical to psychologic issues.
Dying Young portrays two additional major oncology issues. First, as the nurse/companion, the woman teaches herself about anticancer diets, nutrition, and herbs (from San Francisco’s Chinatown) and prepares them for the young man. The 1990 American Cancer Society Cookbook is featured prominently. Second, at the beginning of the film, both characters smoke cigarettes. However, following her self-education, she dramatically discards cartons of cigarettes.

Why don’t films depict the common cancers — lung, breast, prostate, and colon? As noted above, Hollywood moviemakers prefer young, attractive victims and clean cancers. There is little cinematic attraction to the messiness of colons and prostates. Although mainstream films have a long love affair with naked breasts, breast cancer subverts nudity by presenting the organ as diseased. After all, is a breast with cancer sexy? I am aware of only one small scene in film alluding to breast cancer, despite this being a frequent topic for made-for-television movies. In Critical Care (1997), a film that otherwise does not deal with cancer, a nurse in a critical care unit tries to comfort a patient with end-stage renal disease and renal transplant rejection who does not want to return to dialysis. To show that she understands his fears and suffering, and that she too has faced the possibility of her own death, she removes her blouse and shows him her mastectomy site.

Hollywood has always been enamoured with cigarettes, which limits its ability to portray smoking-related disease. Cigarettes are arguably the most important carcinogens in real life, but their role in cancer incidence is rarely portrayed in film. Cigarettes and smoke have portrayed sexiness and atmosphere throughout the history of films; smoking allows actors a quiet action device while delivering lines of dialogue. More recently, as the costs of financing feature films has risen markedly, corporate fees for “product placement” have supplemented film revenues. Cigarette companies, limited by law from television and certain other types of advertising, have had to use their products featured prominently and appealingly in movies.

Cigarette smoking was the implied cause of laryngeal cancer depicted in The Doctor, and the young woman discards cartons of cigarettes in Dying Young. These events comprise the extent of Hollywood’s depiction of smoking-related cancer.

Medical research has always been portrayed in Hollywood film as altruistic and slightly eccentric. The earliest medical theme movies were about researchers, and Dark Victory [1939] was the first film that alluded to cancer research. In that film, the neurosurgeon walks away from a lucrative society practice and sets up a medical research lab in a Vermont farmhouse to search for a cure to glomerulonephritis.

In Medicine Man [1992], a reclusive and eccentric scientist, played by Sean Connery, finds the cure for cancer in an open-air research lab in the Brazilian rain forest (this magic compound comes from insects in a rare flower found in only one area of the jungle). Civilization is encroaching on that region of the rain forest, and trees are being cleared for agriculture. The film portrays the purity of an aboriginal culture, primitive medicines, and the potential pharmacopoeia of the rainforest. The aboriginal “depsiva,” or medicine man, discloses the key to discovering the cure. The villains in the film are the corporate pharmaceutical companies who would take this discovery and profit from it without necessarily helping human suffering. The scientist has a limited supply of the miracle compound, and he uses most of it to trying to analyze its ingredients. He expends the last of it to cure a child with cancer; an abdominal mass disappears overnight after its administration. In an attempt to subvert the clearing of the forest, he accidentally ignites an explosion that destroys the forest, his laboratory, and his research notes, making this scientist the only movie character to both discover and destroy the cure for cancer.

Experimental cancer therapy, alternative cancer treatment, and home hospice care are themes first depicted in My Life [1993]. A young couple is expecting a first child, but the husband is suffering from renal carcinoma metastatic to the lungs. He receives experimental interleukin-2 therapy, but his tumor does not respond. He has no other treatment options and is given a poor prognosis with only a few months to live. He cannot share his emotions with his wife, and since he never expects to witness the birth of his child, he makes a video for his unborn child in which he expresses his feelings. He seeks out an Asian healer, played by Haing S. Ngor, a real Cambodian physician who escaped the killing fields of his native country and is an actor in the United States. The healing he receives is certainly not mainstream, but it helps him to accept his disease and impending death. At the end, he develops brain metastases and receives home hospice care. He lives long enough to see his newborn child. His death scene is portrayed cinematically as a wild roller coaster ride that allows him to overcome his fears as he leaves life.

The image of alternative or complementary cancer therapy has evolved significantly in the last 10 years. As recently as 1991, a text published by the American Cancer Society detailed the spectrum of alternative therapy methods and decreed their lack of scientific basis.16 That same year, investigators reported the results of a study involving 11,000 breast cancer patients—half treated with orthodox therapy, and half with no treatment. Although survival was not different, the authors noted that patients treated with alternative therapies, and no differences in outcomes were observed between the two treatment groups.17 However, public interest in and demand for alternative cancer treatments increased. In one recent report, 28% of women with newly diagnosed breast cancer sought alternative therapies; their quality of life measures and outcomes were worse than those women who did not seek alternative therapies, indicating that use of alternative therapy may be a marker of clinical and psychologic distress.18

My Life corresponds temporally to public debate and initiatives in public policy concerning alternative therapies. In 1990, lobbyists for unproved treatments persuaded Congress to mandate a study to evaluate a particular unproved method.19 In 1992, the Office of Alternative Medicine was created by US Congressional mandate. In 1998, it became the National Center for Complementary and Alternative Medicine within the National Institutes of Health, under the Omnibus Appropriations Bill.20 Its mission is to facilitate, support, and conduct research, training, and information dissemination in alternative treatments.

After the failure of the federal health care reform legislation in 1993, “managed care” by private health insurance companies thrived. However, patients and physicians expressed some dissatisfaction with restricted insurance plans that limited patient choice of physician or hospital or that denied payment for complex or costly medical procedures. A medical insurance company became the villain in The Rainmaker [1997] by denying payment for a bone marrow transplant procedure for a young man with leukemia. In this film, a young lawyer with few prospects files suit against the insurance company in this seemingly hopeless case. Following the death of the young leukemia victim, the suit becomes a wrongful death action. The lawyer, played by Matt Damon, eventually uncovers documentation that the insurance company knowingly denied payment for all such procedures, despite its own conclusion that bone marrow transplantation was effective and medically indicated. The Rainmaker is one of the few films to portray a medical economic issue as a major movie theme.

The economics of medicine have been infrequently portrayed in Hollywood films. Prior to WWII, the fees for real medical care were paid in cash directly to a general practitioner. Fees were not standardized and practitioners often charged more to those able to afford higher fees, offsetting reduced fees for those unable to pay. Higher-cost complex care was less prevalent than it is today but still was not affordable by many citizens. Health insurance was not widely available or purchased. Blue Shield was a large insurance company but did not offer standardized contracts and practitioners often charged more to those able to afford higher fees, offsetting reduced fees for those unable to pay. Higher-cost complex care was less prevalent than it is today but still was not affordable by many citizens. Health insurance was not widely available or purchased. Blue Shield insurance to pay physicians’ fees and later Blue Cross insurance to cover hospitalization costs were community risk policies first created by physicians and hospitals to defray catastrophic costs. In Dark Victory [1939], the patient is a rich society debutante, able to afford a specialist neurosurgeon as well as several consultants, to treat her brain tumor. Intens IV cannot come with it [1937] detailed the standard of care that hospital trainees provided for those unable to afford private specialists. Films such as Green Light [1937] and Dark Victory [1939] portrayed medical research as altruistic and private medical practice as mercenary.

After WWII, health insurance became more widespread as a benefit of employment. The theme of medical economics disappeared from film until Midnight Cowboy [1969], as discussed above. In Love Story [1970], the young man’s conflict with his controlling father impels him to separate financially from his wealthy father. When his wife is diagnosed with leukemia, he cannot afford the cost of treatment and is forced to ask his father for $5,000, which leads to eventual reconciliation. In Regency [1991], a wealthy lawyer suffers paralysis due to a gunshot wound to the head. He cannot continue to work, and the subsequent chronic care and rehabilitation depletes the family savings. His wife begins to work, and they move to a smaller home to adjust financially. The changes are not severe, but rather are portrayed as improvements in their life.

Stepmom [1998] was directed by Chris Columbus, whose own mother died of cancer prior to the film’s release. He gives a dedication to her in the credits. In this film, a divorced mother, played by Susan Sarandon, develops cancer. Her ex-husband’s new girlfriend takes care of her two children while she receives treatment. As her disease progresses, and her prognosis worsens, it becomes apparent to the mother that the girl will become the children’s stepmother after she dies. The adjustment to and acceptance of her situation and their relationship become the basis of the film. The description of the type of cancer in Stepmom is vague; there are allusions to a “lump” detected (breast cancer or lymphoma?) and to initial treatment with surgery and radiation. When her cancer recurs, she begins chemotherapy. Unlike Dying Young, chemotherapy in this film is depicted as tolerable and relatively convenient. The patient uses a portable infusion pump that can be worn on her belt, and she receives outpatient treatments. Her nausea is controlled by smoking prescription marijuana. Her death is not portrayed on film, but rather the final scenes are her last Christmas with her family. This is a common approach in Hollywood movies; terminal Christmas scenes are also used in Dying Young [1991] and One True Thing [1998].

Stepmom is notable because the oncologist is a black woman. Black physicians have been rarely portrayed in film. The earliest film with a black physician that I could find is Lost Boundaries [1949] in which a light-skinned black physician is forced to pass as white in order to practice his profession. In Guess Who's Coming to Dinner? [1967], a young white woman brings home her fiancé, a black physician played by Sidney Poitier, to meet her parents, played by Spencer Tracy and Katharine Hepburn. Despite its

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Cancer invades the life of its victim, but the disease also affects families of cancer patients. This aspect is portrayed in *One True Thing* [1998], which was adapted from the Anna Quindlen novel. A suburban wife/mother develops cancer, type unknown. The husband/father, who is an emotionally detached college professor of English literature, withdraws and asks their daughter to care for her mother during her illness. The daughter, a staff writer for a New York magazine, resents leaving her lifestyle and career to care for her mother. The daughter’s reexamination of her priorities, her adjustment to filling her mother’s role, and her relationship with her parents are the core of the film.

*One True Thing* features a woman oncologist and a home care nurse. The mother/patient is more comfortable and open discussing her increasing medical difficulties (eg, pain, limitations in self-bathing or grooming) with her nurse than with her daughter. The film realistically depicts the anger cancer victims experience as their usual daily activities become more restricted. It also portrays the difficulties and stress that family members often experience yet are reluctant to acknowledge openly. The film ends with a brief allusion to assisted suicide. The mother begs her daughter and husband to help her die when she reaches an intolerable level of pain and disability. When the mother is found to have died from an overdose of narcotics, the daughter assumes the father assisted the suicide, and the father assumes the daughter did. In fact, the mother ended her own life with the overdose, sparing either of them the responsibility.

**Conclusions**

This analysis of 20th-century films with cancer themes has confirmed several points. (1) Hollywood films rarely depict common cancers. Uncommon cancers such as leukemia and brain tumors predominate because they are considered “clean.” (2) Medical themes in mainstream movies reflect demographic taste trends. (3) Films with medical themes changed significantly in the 1970s due to changes in the film industry and to public health policy changes in oncology. (4) Important health policy issues related to economics, research, gender, and race are infrequently portrayed in films. However, public policy is often translated to film topics. (5) Important clinical oncology issues, including treatment, symptom management, amelioration of side effects, and facilitation of the process of dying, have been reflected in movies. (6) In large measure, Hollywood films reflect contemporaneous oncology policy and practice. In large measure, art does imitate life.

**References**